

THE RAILWAY GAZETTE
A Journal of Management, Engineering and Operation
INCORPORATING
Railway Engineer • TRANSPORT • The Railway News
The Railway Times • Herapaths Railway Journal
RAILWAYS ILLUSTRATED
ESTABLISHED 1835 • THE RAILWAY OFFICIAL GAZETTE

PUBLISHED EVERY FRIDAY
AT
33, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1
Telegraphic Address: "TRAZETTE PARL., LONDON"
Telephone No.: WHITEHALL 9233 (7 lines)
Annual subscription payable in advance and postage free
British Isles and Abroad.....£2 5s. 0d.
Single CopiesOne Shilling
Registered at the General Post Office, London, as a Newspaper

Vol. 76 No. 15 FRIDAY, APRIL 10, 1942

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DIESEL RAILWAY TRACTION SUPPLEMENT
The April issue of THE RAILWAY GAZETTE Supplement, illustrating and describing developments in Diesel Railway Traction, is now ready, price 1s.

GOODS FOR EXPORT

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this paper should not be taken as indicating that they are necessarily available for export

NOTICE TO SUBSCRIBERS

Consequent on further paper rationing, new subscribers cannot be accepted until further notice. Any applications will be put on a waiting list which will be dealt with in rotation in replacement of subscribers who do not renew their subscriptions

POSTING "THE RAILWAY GAZETTE" OVERSEAS

We would remind our readers that there are many overseas countries to which it is not permissible for private individuals to send printed journals and newspapers. THE RAILWAY GAZETTE possesses the necessary permit and facilities for such dispatch. We would emphasise that copies addressed to places in Great Britain should not be re-directed to places overseas

REDUCTION IN SIZE OF PAGE

To economise in paper our readers will observe a slight reduction in the size of THE RAILWAY GAZETTE in that the size of the page has been reduced from 9 in. x 12 in. to 8½ in. x 11½ in. The type area of the page remains the same, namely, 7 in. x 10 in., but the surrounding margins have been reduced. This of course detracts from the appearance of the paper, but is one of the exigencies of the war

TO CALLERS AND TELEPHONERS

Until further notice our office hours are:
Mondays to Fridays 9.30 a.m. till 5.0 p.m.
The office is closed on Saturdays

ERRORS AND MISPRINTS

Owing to shortage of staff and altered printing arrangements due to the war, and less time available for proof reading, we ask our readers' indulgence for typographical and other errors they may observe from time to time

A General Staff of War Production

MR. OLIVER LYTTTELTON'S first statement as Minister of War Production to the House of Commons embodied the announcement that the War Cabinet had agreed that he should set up a General Staff of War Production which is to be composed of Sir Walter Layton, the Minister's chief adviser on Programmes & Planning, the Assistant Chief of Staff of the three Services, and the highest technical officers of the three production Ministries. This General Staff is to be the servant on war production of the Defence Committee. The announcement marks a step in the right direction so far as war production is concerned, and it is one which might with advantage be followed in relation to British industry. It will be recalled that in our issue of August 15, 1941, we pointed to the need for an Industrial General Staff, the aim of which would be to make the best and most efficient use of the industrial fabric and its ramifications with the life of the nation. It is, of course, essential at this stage of the war that every effort should be taken which is calculated to stimulate and control war production, but since in these days production for war purposes falls very largely on industry it is open to doubt whether the committee now announced will be as effective as would have been an Industrial General Staff drawn from the ranks of practical business men devoting the whole of their energies to the task before them. A body of the kind we postulated would be not merely of inestimable value during the war, but would have had equal value in the period of post-war reconstruction. It may well be that now that the Government's mind is obviously moving at least along the lines we indicated, it may ultimately decide to take the step which commends itself to so many in close touch with industry.

London Transport 4½ per cent. "T.F.A." Stock

The London Passenger Transport Board has been in negotiation with the Treasury with reference to the redemption of London Transport 4½ per cent. "T.F.A." stock amounting to £12,583,000, of which the principal and interest are guaranteed by the Treasury under the Trade Facilities Acts, 1921 to 1926. Subject to the necessary Parliamentary powers being granted to the board, the Treasury has agreed to the issue by the board of stock of a new class which would have the same ranking as the existing "T.F.A." stock, with a similar guarantee by the Treasury but carrying such lower rate of interest as the board, with the approval of the Treasury, may determine. The board is therefore taking the necessary steps to obtain leave to promote a Bill in the present Session of Parliament to authorise it to create and issue the new class of stock. Subject to no unforeseen circumstances arising in the meantime, the new stock will be issued, and redemption and conversion of the existing "T.F.A." Stock effected, on January 1, 1943. Not less than three months' previous notice of redemption will be given.

Mr. E. B. Fielden

The death of Mr. E. B. Fielden has removed one who for many years had served with distinction as a railway director, and whose family has been associated with the industry for well over a century. Mr. Fielden served as Deputy Chairman of the London Midland & Scottish Railway Company from the time of its formation in 1923 until 1940. His association with railways began in 1897 when he was appointed to the board of the Lancashire & Yorkshire Railway Company to fill the vacancy caused by the death of Mr. Thomas Fielden, M.P. Mr. E. B. Fielden became Deputy Chairman of that company in 1903, and Chairman in September, 1918. He had thus over 42 years of active railway work, and the wide range of his experience in industry generally, and in public life, in which he held many offices, made him the ideal railway director, for it enabled him effectively to bring his many-sided knowledge to bear on railway problems. The late Lord Stamp paid high tribute to Mr. Fielden when he announced his resignation from the board at the annual general meeting of the L.M.S.R. in 1940. Lord Stamp pointed out that one of Mr. Fielden's forbears had been present 105 years earlier at a meeting which had resulted in

the formation of the Manchester & Leeds Railway, and the family had been associated ever since with that railway and its successors.

Supervision and Leadership

The qualities of supervision and good leadership perhaps never have assumed such importance from a national viewpoint as at the present time; apart from their value in the higher offices of state these attributes are essential throughout industry. We made some reference to the problem of supervision as it affects railways in our issue of March 13, and in the March issue of the *Great Western Railway Magazine* attention is directed to it, more particularly as it relates to the tradition of conscientious, fearless, and fair supervision which has become part of that railway company. It is pointed out that the main characteristics in relation to supervisory work on the railways include setting an example of good leadership; studying the individual qualities of those under supervision; making every effort to ensure that exceptional capabilities or qualifications are recognised and put to the best use in the company's interests; being tolerant to the man who feels he has a grievance, and seeing that it is investigated; showing consideration to others, particularly when cautions or reprimands are necessary and leaving the recipient with no illusion as to the nature of his failing which has compelled the rebuke. In all walks of life the higher the status of the supervisor the greater is the individual responsibility because of the larger numbers under his jurisdiction. His aim should be always to get the best results from his men, and this cannot be done unless he has studied their interests.

"Tramways" of the Netherlands East Indies

Numbers of the private railway companies operating railways in Java bear the title of steam tramway companies (*Stoomtram* in Dutch). This title is a little misleading, as the most important of these companies operate main-line railways and secondary lines of the same standards of construction, equipment, and operation as the State Railways of Java. They cannot even be regarded as light railways. The reason for this nomenclature lies in the fact that the original promoters and engineers were accustomed to differentiate in the home country of Holland between standard-gauge railways and narrow-gauge tramways. Another reason was that the Government regulations were comparable with those of the home country for light railways and tramways. In the early days signals, for instance, were entirely absent from all Dutch Indies lines, a permissible policy when trains were run only in daylight. The construction standards and the operating methods, however, have been those of railway main lines, from the beginning. The Semarang-Cheribon Steam Traction Company has a main line classified as a first class line, over which high-speed through express trains as well as the heaviest goods trains are operated. Similarly the main line of the former Samarang-Gambringan and Gundih-Soerabaya Steam Tramway Companies (now part of the Netherlands Indies Railway) from Semarang to Soerabaya is part of the country's trunk line system. The Samarang-Joana Steam Tramway Company operates a system of second class main lines in the coastal districts between Soerabaya and Semarang.

The Phillimore Railway Collection

Great Britain has never possessed a really comprehensive national railway collection like those of many other countries, despite the fact that it was here that the public railway and the steam railway were evolved. It is no disrespect to the Science Museum, upon which great care and much learning has been expended within recent years, to say that the preservation of many of our railway heirlooms is the result of private enterprise. The York Railway Museum is an example of such activity on the part of individual railway companies, and may one day form the nucleus of a national collection. Then there is the wonderful collection of old Great Western Railway prints and broad-gauge relics which in pre-war days were displayed in the main corridor of the company's offices at Paddington. The other main-line railways, since grouping, have also assembled valuable col-

lections, but our national railway heritage would be the poorer but for the purely private collections of such enthusiasts as the late John Phillimore, and Mr. C. F. Dendy Marshall. It is therefore with regret that we have in front of us a catalogue of Messrs. Sotheby & Company for the sale by auction on April 28, of the Phillimore Railway Collection, by order of the executors. John Phillimore was an assiduous collector of many things relating to railways, and he amassed a valuable and intelligent assembly of books, maps, manuscripts, prints and pictures, pottery, porcelain, and glass, and many other items (all fine specimens and some unique) relating to railways and locomotive engines. In happier circumstances Mr. Phillimore might have presented his collection to the nation, but it represented no unimportant part of his personal assets, and such a gift would have been made to the unjustifiable detriment of his personal heirs. Must such a collection be broken up under the hammer and distributed, or even at this late hour could not an effort be made (for example by the Railway Companies Association) to expend the relatively small total sum involved in buying the whole, or the major portion of the Phillimore Railway Collection so as to preserve it as part of an eventual national museum?

A Lost Time Inquiry

There are probably few other countries in the world in which privately-owned railways carry out their functions in more severely restrictive conditions than in the United States. On behalf of the Federal Government, the Interstate Commerce Commission exercises a rigorous control, but each individual State also has wide powers to enact laws and take proceedings of various kinds that affect the railways considerably. Recently, for example, the New York Public Service Commission has been conducting an inquiry of extensive scope into the operation of passenger services on the New York Central System, arising out of allegations of inefficiency in various respects. As to unpunctuality, the N.Y.C. was able to prove that the average late arrival—a lateness of 5 min. or over—of 49 of its through trains had been reduced to 24 per cent. in 1941 from 41 per cent. in 1940, and more than half these late arrivals were due to the late running of connections. Eliminating such delays, of the remainder station work was responsible for 38 per cent., signal delays from other trains for 35 per cent., and permanent-way work for 8 per cent.; only 5 per cent. were due to equipment failures. One serious cause of delay was collisions between trains and motorcars at level crossings, which delayed 104 passenger trains between July and December, 1941, with a total loss of over 45 hr. The energy with which the New York Central has been tackling this problem of late running is seen in the track and signalling improvements along the main line described on p. 454, and the improvement of rolling stock, to which reference is made on the same page, is also being carried on unceasingly.

"It's in the Van"

To all but the most hardened travellers there comes a feeling of triumph when a large piece of luggage has been piloted successfully through a long journey. Realising the anxieties attendant upon such a performance, the printers of luggage labels usually head their products with an admonition to porters and others such as "with care," or announce that theirs is the distinctive label which will enable users to identify their belongings with absolute certainty and from a great distance. Probably purchasers have no deeper faith in the efficacy of such devices than they have in the accuracy of their astrological forecasts in the Sunday newspapers, but regard both as a courageous and comforting human challenge to the unknown. Some labels even conclude with the monosyllable *per* and a short dotted line, whereon the nervous user is possibly expected to write the word "rail" to avoid a last-minute misunderstanding after the article labelled has been deposited in the van. We know of one label which provides a space for inserting the date on which it is hopefully applied to the luggage, doubtless for the information of posterity and in much the same spirit as current coins are sometimes buried in the foundations of a new building.

Queensland Government Railways

FOR the third successive year the gross earnings for the twelve months ended June 30, 1941, were a record; they amounted to £8,196,018, or £259,032 more than in the previous period. The volume of business, whether measured by gross earnings, tonnage, train mileage, or gross ton miles, was the greatest in the history of the railways. Working expenses were £6,568,732, an increase of £313,874, and the net earnings were lower by £54,842. The principal operating figures compared as follows:—

	1939-40	1940-41
Miles open...	6,467	6,467
Passenger journeys	24,532,228	26,059,005
Goods, minerals, and livestock, tons	5,418,823	5,508,166
Train miles	14,090,419	14,466,291
Operating ratio, per cent.	78.81	80.15
Passenger revenue	1,573,732	1,711,371
Goods, minerals, and livestock revenue	5,646,285	5,695,057
Total earnings	7,936,986	8,196,018
Working expenses	6,254,858	6,568,732
Net earnings	1,682,128	1,627,286

After meeting interest on capital (£1,675,495), there was a deficit of £48,200. Net earnings represented a return on capital of £4 1s. 9½d. per cent. (against £4 5s. 4½d.). Operating ratio, at 80.15 per cent., was 1.34 per cent. higher. Of the increase in total earnings, £137,639, or more than half, was derived from passenger traffic, the improvement in which was due to troop movements, restriction of coastal shipping, and to the effect of petrol rationing on road transport. Average haul of paying goods and livestock was 150.76 miles, and average receipt 1.67d. per ton mile. Average net train load was 103 tons, and gross, 273 tons. Average wagon load was 7.35 tons, and wagon mileage per truck per day was 34.44. All these averages show an improvement on those of previous years.

Working expenses were increased by additional payments to the staff for basic wage, award, and automatic increases, and the debit to revenue for permanent way relaying was £105,000 greater. Locomotive power was increased by the construction at the Ipswich workshops of eleven engines, nine of the "B18½" type and two of the D.17 suburban type. Two complete diesel rail-motor units were also constructed at Ipswich. Rail motor passenger running decreased by 174,586 miles, due to increasing traffic necessitating the replacement of motor by steam trains, but motor train mileage is still equal to almost half the steam passenger mileage. The Roma Street Station at Brisbane was officially opened by the Minister for Transport on November 30, 1940. Throughout the year the Department continued actively to assist the national war effort. The report points out that the railways, as in the last war, have successfully coped with greatly increased traffic; other forms of transportation whose development has been claimed by some critics to presage the eclipse of steam locomotion, have been seriously affected. The vital importance of the railway system to the well-being of the State during a period of conflict is once again demonstrated.

The Roumanian State Railways

ALTHOUGH the first railway in Roumania was built as the result of a concession granted to an Englishman—John Trevor Barkley—and was opened on October 19, 1869, between Bucharest and Giurgiu (Giurgevo) on the Danube, a distance of 70 km. (43 miles), the building and operation of railways by private enterprise did not last for long. In 1888 a law was passed whereby all the railways in the country, which then had a total length of 2,472 km. (1,536 miles), were transferred to State ownership. By 1916 this had increased to 3,588 km. (2,229 miles). As one of the Allied and Associated Powers, Roumania gained very considerable tracts of territory from her neighbours after the war of 1914-19, increasing the railway system to a total route length of 11,130 km. (6,916 miles), made up as follows:—

Old Kingdom	4,017 km. (2,496 miles)
Transylvania	5,324 km. (3,308 miles)
Bessarabia	1,234 km. (767 miles)
Bukovina	555 km. (345 miles)
Totals	11,130 km. (6,916 miles)

A break of gauge existed between the railways of the

Old Kingdom and those in the former Russian State of Bessarabia, but, like Poland in similar circumstances, the standard European gauge of 4 ft. 8½ in. was introduced on all the main lines in the country. The Roumanian State Railways Administration was constituted an autonomous and commercialised State undertaking, under a law of July 1, 1929. By 1939, the total mileage had increased to 11,375 km. (7,068 miles), of which 10,715 km. (6,658 miles) was standard gauge, and 660 km. (410 miles) of narrow gauge. Approximately one-third of the railways was lost in 1940 by territorial cessions to neighbours, comprising Bessarabia and Northern Bukovina to Russia in June, Southern Dobruja to Bulgaria in August, and Northern Transylvania to Hungary in September. The railway mileage lost was as follows:—

	Standard Gauge	Narrow Gauge
To Hungary	1,750 km. (1,087 miles)	355 km. (220 miles)
To Bulgaria	65 km. (40 miles)	—
To Russia	1,665 km. (1,035 miles)	65 km. (40 miles)
Totals	3,480 km. (2,162 miles)	420 km. (260 miles)

Apparently the figures of railway mileage lost include a small amount of privately-owned branch mileage, so that the loss to the Roumanian State Railways is slightly less than the total of 3,900 km. (2,422 miles). The sections ceded to Russia were converted to the 5-ft. gauge, but since the Axis invasion of Russia they have been reconverted to 4 ft. 8½ in., the third major conversion in the history of Bessarabian railways.

The American Rolling Stock Position

SOME astronomical figures as to the war needs of American railroads were given in a recent address by Mr. William C. Dickerman, Chairman of the American Locomotive Company. Basing his calculations on the fact that the total wagon loadings in 1941 were between 42,000,000 and 43,000,000, or 19 per cent. over those of 1940, and on the belief that in 1942 they will rise to between 46,000,000 and 47,000,000, or 10 per cent. over the 1941 total, the speaker referred to the programme laid down early in 1941, which provided that by October 1, 1942, American freight car stocks should be increased to a total of 1,800,000 cars. On July, 1940, there were 1,646,000 freight wagons in the U.S.A., and it was decided to increase their number to 1,700,000 by October 1, 1941; but due to shortage of materials the number actually built between these dates was only 30,000, or 24,000 short of requirements. Allowing for arrears of construction, and also the 30,000 wagons needed in normal replacement of worn-out stock, Mr. Dickerman claimed that a total of 154,000 would be needed, requiring 3,388,000 tons of material, and including, most difficult of all to obtain, 554,000 tons of steel castings. During the first ten months of 1941 the average number of new wagons put into service was 6,500 monthly, but by October the monthly figure had risen to 9,000, the highest to date. Even if this could be maintained, the number of completed wagons by October 1, 1942, would fall short of the desired total by 45,000; if the average in the intervening months were no higher than the average for most of 1941, however, the programme would fall short by 75,000 wagons. One important step towards higher wagon output has been the drastic limitation by the Association of American Railroads of the number of different designs of wagon that may be built, as referred to at pages 91 and 110 of the January 16 and 23 issues, respectively, of THE RAILWAY GAZETTE. It is unfortunate that this standardisation will bring to an end, temporarily at least, many promising developments in wagon design and construction, such as the latest 50 ft. 6 in. box wagons of the Chicago, Milwaukee, St. Paul & Pacific RR., in which a completely welded design has been applied with such success as to give a capacity of 5,157 cu. ft. for a tare weight as low as 21½ tons. It is felt that apart from such rigid standardisation of wagon design, the obtaining of an adequate supply of materials for wagon construction would be an insuperable problem.

The locomotive position is rather more complicated. The number of locomotives available increased from 35,243 on November 1, 1940, to 37,530 a year later—a gain of 2,287—and the number actually in service increased by 2,803 from 33,126 to 35,929; a considerable reduction had been effected

in the number awaiting or under repair. On November 1, 1941, the total number of locomotives on order or under construction was 985, as compared with 295 a year earlier; of the 985, 311 were steam locomotives for United States use, 267 of which were on order with manufacturers, and 44 being built by the railways themselves. In addition, many steam locomotives were on order for export, including 33 for Mexico, 20 for the Yunnan-Burma Railway, and up to 250, under Lend-Lease provisions, for the Near East. Considerably more than half the present locomotive-building arrears were in diesel-electric units, of which more than 500 were building or on order, and for this reason Mr. Dickerman did not think that many more orders will be placed for diesel-electric power. He calculated that the minimum number of locomotives which the American builders would be asked to deliver in 1942 was 1,000, divided into roughly equal proportions as between steam and diesel units. As to the unpredictable conditions of 1943, Mr. Dickerman concluded by saying, "One possible solution of the situation at that time may be not merely the freezing of locomotive designs, but the restriction of the designs that will be made available. This is a likelihood which all of us should be turning over in our minds now."

....

Twenty-five Years of the Mitropa

WHILE the war of 1914-19 was still in progress, Germany strove to reorganise the Continental sleeping and restaurant car services by founding the Mitropa (or Mitteleuropäische Schlafwagen-und Speisewagen Aktiengesellschaft), which inaugurated its first services on January 1, 1917—25 years ago. Up to 1914 the sleeping and restaurant car services of the Compagnie Internationale des Wagons-Lits et des Grands Express Européens were predominant in central and south-eastern Europe, and that company also maintained some internal services in Germany. Others were operated by a number of German restaurant car companies, while the Prussian State Railways maintained their own sleeping car services. Before 1914 the Prussian-Hessian Railway Administration had decided not to renew its contracts with the Wagons-Lits Company and this action was accelerated by the war. After prolonged negotiations between German, Austrian, and Hungarian financial institutes and the administrations of the respective State railways, the Mitropa was founded on November 24, 1916. At the outset it was entrusted with the operation of all the sleeping and restaurant car services in Germany. The notice of the Austrian State Railways to the Wagons-Lits Company became effective on January 1, 1918, and the services on that system were taken over by the Mitropa as from that date. In Hungary the transition took place gradually; as the Wagons-Lits contracts for the operation of particular services came to an end, they were not renewed and the services taken over by the Mitropa. At first the Mitropa services used rolling stock taken over from the various State and privately-owned concerns which the Mitropa had supplanted. By May 1, 1917, the Mitropa was also maintaining all restaurant car services in the territories then occupied by Germany and

Austria-Hungary. In 1918, the Südbahn lines between Vienna and Trieste, as well as Budapest and Trieste, were included in the Mitropa system, and the company's rolling stock had increased from 116 to 225 cars by the end of that year.

In 1921, British and Canadian railway interests acquired (by means of a Swiss concern) 40 per cent. of the Mitropa share capital and thus the company lost its exclusively German character. As a result of certain clauses contained in the Versailles Treaty, the Mitropa was compelled to withdraw completely from Austria and Hungary, and 29 sleeping cars out of the company's rolling stock (numbering 267 units at that time) had to be handed over to the Western Powers; furthermore, in accordance with the outcome of legal action taken by the Compagnie des Wagons-Lits et des Grands Express Européens against the Mitropa, the latter was forced to return 25 restaurant cars and three sleeping cars. The Mitropa hired German State Railway restaurant and sleeping cars to enable it to meet the demands of the public. Since 1924 the Mitropa has given the Reichsbahn a fixed share of the income accruing from the sale of the sleeping berth tickets, as well as a preliminary annual dividend of 25 per cent.; the Reichsbahn arranged, moreover, to participate in the company's profits proportionately to its ownership of Mitropa shares and debentures. An agreement between the Wagons-Lits and the Mitropa was reached in 1925, whereby the Mitropa retained its services in the Netherlands and Scandinavia, maintained services on the most important routes between Germany on the one hand and the Czechoslovak spas, Vienna, and Switzerland on the other, apart of course from all the services in Germany.

In subsequent years the Reichsbahn was able gradually to increase its influence with the Mitropa, and by 1927 about 90 per cent. of the Mitropa share capital was Reichsbahn-owned. The Mitropa had thus become practically a State-owned concern. Its present share capital amounts to Reichsmark 18,820,000. The Mitropa rolling stock includes more than 600 cars, about 200 of which were operating in Germany at the outbreak of war. In recent years Mitropa services have been extended to fast stopping trains (*Eilzüge*) in Germany, and the company has also acquired station restaurants; there are now station restaurants under Mitropa management at Katowice and Poznań (both "taken over" from the Polish State Railways) as well as at Frankfurt-on-Main and at Königsberg. The service which the Wagons-Lits had been maintaining in Sudetenland and in Austria were taken over by the Mitropa in October, 1938, while those in Bohemia-Moravia followed suit in May, 1939. The Slovak services of the Wagons-Lits were taken over a few months later. At the outbreak of the present war all Mitropa services were suspended, but were gradually resumed from the middle of September, 1939. Mitropa services were extended to the occupied territories in Western Europe and to Poland during 1940. New services between Germany on the one hand, and Hungary and Roumania on the other, were established in the summer of 1941. The total of Mitropa cars operating at present is smaller than before the war, but the vehicles are concentrated on a smaller number of lines.

Publications Received

Surface Hardness of Metals.—With this as its title and ranking as publication No. 108, a brochure has been issued recently by the Tin Research Institute. The author is Bruce Chalmers, D.Sc., Physicist at the institute, the head office and laboratories of which in this country are located at Greenford, Middlesex. In this publication, which comprises 22 pages and a cover, details are given of a method for measuring the hardness of thin surface layers of metals and other materials in which the reduction in optical reflectivity is determined when known quantities of sand are allowed to impinge on the surface under standardised conditions. Applications of this technique are described in cases where other methods of measuring hardness are unsatisfactory

and some indications are given of the possibility of applying the method to investigations on the properties of surface films. The text is accompanied by a number of line drawings, mostly graphs, and some half-tone illustrations; also by several useful tables.

U.S.A. Railway Statistics.—The Interstate Commerce Commission of the U.S.A. has issued its preliminary summary of the statistics for all the steam railways in the United States which have operating revenues over \$5,000,000. The comparisons cover three years results, instead of four years as in the last summary. Accounting and statistical figures from the returns of the individual companies are given in the present volume for the years 1938, 1939 and 1940. Total figures by regions and districts for all Class I railways will appear in due

course in the annual report of the commission. The summary may be obtained from the Superintendent of Documents, Bureau of Statistics, Interstate Commerce Commission, Washington, D.C., price 60 cents.

Low-Voltage Air-Break Switchgear.—The English Electric Co. Ltd., Stafford, has issued an attractive brochure, ranking as Publication No. SG/101, which deals with its class OB high-breaking-capacity air-break switchgear. The use of this kind of switchgear is particularly appropriate in industrial and other sub-stations where increased safety against fire-hazard, due to elimination of oil, is of major importance, and also on circuits where a high breaking-capacity is required. The OB air circuit-breakers are made in single, double, and triple pole forms and for use on a.c. or d.c. low-voltage systems up to 660 volts.

THE SCRAP HEAP

There has been a big increase in the amount of property left in trains and other public vehicles. The public left 242,525 articles in London Transport vehicles last year; 19,151 were gas-masks.

A box marked "Daddy's Favourite Sauce" was carried into the box at Tower Bridge court recently. A detective took two bottles of whisky and four bottles of gin out of it.

An elderly lady motorist was recently driving along a country road when she noticed a couple of repairmen climbing a telephone pole.

"Fools!" she exclaimed to her companion. "They must think I never drove before."

If you took all the economists in the world and laid them down end to end they would not reach a single conclusion.—Mr. P. L. Noel-Baker, Parliamentary Secretary, Ministry of War Transport, at the annual luncheon of the Mansion House Association on Transport.

TRAIN WENT OFF WITH RIFLE

When going on leave, Private Arthur Thorpe, aged 32, of the R.A.O.C., put his rifle and kitbag in a railway carriage at Euston, and ran to buy a cup of tea at the buffet. On his return the train had left, taking his rifle and kitbag with it, which were never recovered. Now Thorpe has been sentenced to 28 days' detention by an Aldershot court martial for losing the articles by neglect, and he also has to make good the cost of the rifle, £5 11s.—From the "Evening Standard."

The tramway administration in Brunn (Brno), the capital of Moravia, has taken in hand what is described as the civic education of the town population. Any inhabitant surrendering a certain number of used tramway tickets will be offered a

free season ticket for one line of the system and a savings book issued by the town's savings bank, with an initial deposit already made. The object is to educate people not to throw their used tram tickets carelessly on the roadway.

118,400 CHEQUES FOR WAR CLAIMS

A big speed-up in the payment of war damage claims was announced recently by Mr. Trustram Eve, K.C., Chairman of the War Damage Commission, who revealed that 118,400 cheques have been sent out this year. In one week recently 16,402 "live" claims—of £5 and over—were paid, a record.

NATIONALISATION WITHOUT PLUMS

A correspondent writes to us saying that in his view much of the active, if not public, support for nationalisation of the railways comes from certain politicians, and the civil service. All these gentlemen foresee the creation of a new Government administration with dozens of nice fat posts. Their interest could be effectively destroyed by the addition of a clause somewhat on the following lines:—

"All members, past or present, of either House of Parliament, and all members, past or present, of the Civil Service, are expressly debarred from appointment to any post in the new administration, or in the railways which come under this jurisdiction."

RAILWAYS AND SMOKING

A student of railway history in the West Country recently discovered a periodical dated September 18, 1841, containing a paragraph to the effect that "an apparently respectable person named Chapman" was fined ten shillings at the Marylebone Police Court for smoking on a platform at Paddington Station. In imposing so moderate a fine for what was then considered a heinous offence, the magistrate said "he wished it

to be understood that any future complaints relative to an infringement of the company's rules and regulations would be visited with the full penalty." The "full penalty" for such nefarious conduct was set out in No. 5 of the company's first by-laws. "No smoking will be allowed in any of the carriages or stations of the company under a penalty of 40s. and the liability of removal from the company's premises and carriages."—Summarised from the "Great Western Railway Magazine."

WASTE PAPER SALVAGE REVEALS A REAL GEM!

The following letter has been sent to us by a correspondent who received it from a well-known firm of London stockbrokers. It is dated February 10, 1939.

Sir,—We are now putting on record our opinion of the present situation and of future developments—

"1. The Axis leaders are no longer confident that their followers and their peoples would support them in an aggressive war against anyone—although they would, of course, fight in a defensive war.

"2. Hitler is certain that his Germans would be extremely loth to lose their lives to further Mussolini's ambitions, particularly as they have no belief in the fighting qualities of the Italians and they think they themselves would have to do all the rough work.

"Furthermore, as in war conditions, the Italians would be starving, the Germans don't see themselves parting with any of their already meagre 'butter,' although they would be quite ready to supply 'guns.'

"3. Mussolini hoped to get something from France without a war, but things are not working that way. Of course, he cannot make war because a defeat would end Italy and a victory would make Italy the slave of Germany. So Mussolini will pipe down and, later on, try to get something on the grounds of justice, brotherly love and trade development.

"4. Spain is not working out too well for Italy and Germany unless, of course, they have all along been quite honest in saying that all they wanted was to crush Bolshevism. That has been done and therefore they may have got all they want. Anyway, they are not going to get much more satisfaction than that.

"Now, granted the truth of these theories, there will be no war (at any rate about present day causes of dispute).

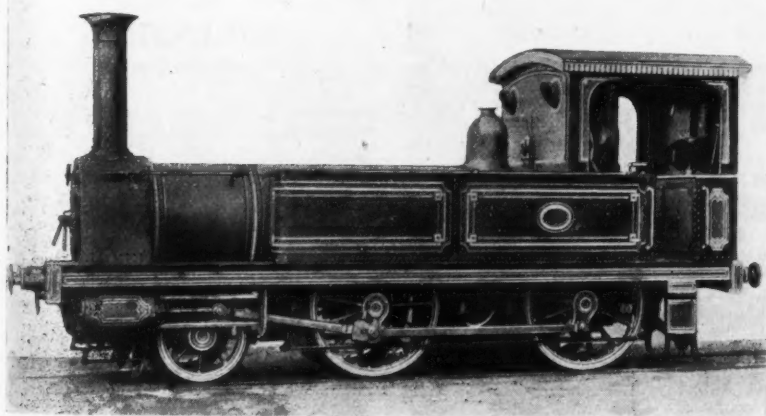
"As we believe that the entire slump, setback, repression, depression or what you will is due to the fear of war which started two and a half years ago, it seems to us that as the shadows of Hitler-Mussolini grow less opaque and finally fade away, so will depression fade away and give place to a brilliant recovery in the world.

"We predict that by February 10, 1940, it will be clear that the world is well along the road to the greatest development that world trade has ever seen.

"We go further and believe that by the end of 1940 we shall all be hurrying to invest our money in the reorganisation of Europe, starting with Spain (probably this year).

"We invite you to put this letter away and re-read it on February 10, 1940, and write us your opinion then of our foresight or foolishness. Should you agree with these views and therefore feel that surplus capital should now be invested, we shall be glad to furnish a list of suggestions on your request."

Our correspondent put the letter away and turned it up when clearing out waste paper in February, 1942.



JAPAN'S FIRST LOCOMOTIVE

The first project for a railway in Japan dates back to 1869, but as the Treasury of that country was in no position to cover the outlay, a loan of a million sterling was floated in London, and construction was begun in 1870. The Vulcan Foundry Limited, of Newton-le-Willows, Lancs, provided the first locomotives to run in Japan. They were of the 2-4-0 T type, and one of their number is illustrated above. It was delivered to the Imperial Railways Administration in 1870

OVERSEAS RAILWAY AFFAIRS

(From our special correspondents)

SOUTH AFRICA

Record Traffic

During December, 1941, main-line passenger traffic reached record proportions; no fewer than 515 special and relief trains, 441 of which were for ordinary passengers, were required to handle it. In December, 1940, the number of specials and reliefs run for ordinary passengers was 409, but as a number of these have since become incorporated in the regular timetables, the actual increase is considerably greater than the difference of 32 trains might suggest. In the Western Transvaal the number of tickets issued, 1,788,035, showed an increase of 13.3 per cent. over December, 1940; the Cape Western total of 1,434,480 was 15.2 per cent. up; and the 518,623 issued in Natal was 26.1 per cent. in excess of the 1940 figure. In all regions the total number of tickets sold rose from 3,780,970 in December, 1940, to 4,410,780 in December, 1941, an increase of 16.7 per cent. Freight traffic was also maintained at a high level, and truck loadings—at the equivalent of 297,941 short trucks—were 1.1 per cent. higher than in the corresponding month of 1940. There were substantial increases in tonnage in all regions except Natal, where there was a decline, chiefly in the carriage of sugar cane, fertiliser, phosphates, and general merchandise.

CANADA

Wage Increases Effect on Profits

The serious effect on the net profits of the Canadian railways of the two series of increases in wages during 1941, in line with the cost-of-living bonus system, is illustrated in the analysis of the year's results as between the first half, and the third and fourth quarters. From June 1, 1941, the railways put into force a bonus to their workers that represented the advance in the cost of living index between September, 1939, and that date. This amounted to \$1.93 a week. Later, when the index rose still higher, representing a net gain of 14.8 points, the railways increased the bonus to correspond, and this brought the aggregate increase to \$3.45. The influence was instantaneous in a sharp falling off in percentage of the gain in "gross revenues" that was conserved in to "net earnings." For example, the C.P.R. showed a gain in gross revenue of \$5,142,420 in March and its net revenue was up \$1,774,513 over March, 1940; in September, however, a gain in gross receipts of \$2,631,703 was maintained only to the extent of \$481,011 in net takings, with lower gains later in the year.

In the case of the C.N.R. a gain in gross profits of \$6,982,735 in April last was accompanied by a gain in the net figure of a very high percentage at \$5,110,381. By November, however, with two advances in wages, a gross increase of \$4,903,518 was all absorbed except \$195,612 by higher expenses and in the final month a gross increase of over \$4,000,000 was transmitted into net with an amount actually less than in December, 1940.

In the first six months of 1941 there was an increase in gross revenues, over 1940 of \$28,033,937. From this there was conserved an increase in net profits of \$15,908,129 representing 57 per cent. In the third quarter, with only a portion of the wage bonus, in effect, only 34 per cent. of the gross increase of \$13,862,083 was retained in the gain in net of \$4,712,881. The results in the final quarter, when the

full wage increase was being paid, were sharply in contrast even with the third quarter, for, out of a gain in gross of \$14,952,533 the increase in net was only \$979,919, or 7 per cent.—less than one-eighth the percentage shown in the first half-year, and only about one-fifth as good as in the third quarter.

Reduced Claims for Damages

Because of improved methods of crating and packing and better methods of loading freight wagons, railways in Canada and the United States have, during a period of 20 years, greatly reduced claims for damages. Mr. A. K. Wilkins, Supervisor of Loading Methods, Canadian National Railways, told members of the Inter-Departmental Educational Society recently. He said that in 1920 United States and Canadian Class I railways paid out in claims \$119,000,000. In 1940 the payments were down to just over \$20,000,000. Although this reduction could not be credited entirely to improved loading practices, there was no doubt that they had played a very important part.

C.P.R. Branch Line

The Canadian Pacific Railway has run a branch line to the edge of Uplands Airport, Ottawa, and has sought to obtain permission from the Board of Transport Commissioners to operate it into the area, but the application has been refused. In its judgment the board rules that Uplands Airport and the Ottawa Car & Aircraft Company are already adequately served by existing trackage. The branch line of the Canadian National Railways has served the area for some time.

UNITED STATES

N.Y.C. Track and Signal Improvements

During 1941 important work was carried out by the New York Central System on its main line between New York and Buffalo, with a view to eliminating delays and speeding up the service. Track and signal improvements at Utica permitted a raising of the speed limit for non-stopping trains from 20 to 50 m.p.h., and similar alterations at Poughkeepsie allowed an easing from 50 to 75 m.p.h. Longer cross-overs were laid in at Albany for the same purpose, and elsewhere a careful study of speed restrictions has been made to enable them to be raised to the highest possible limit consistent with safety. In March, 1941, reverse signalling was brought into operation on the westbound main line between Garrison and Harmon, to permit both eastbound and westbound tracks to be used for eastbound trains during the morning peak hour, when all the long distance sleeping car expresses are running into New York. More than \$500,000 was spent during the year in renewing semaphores east of Buffalo with colour-light signals, and re-spacing them; this was part of a complete programme, estimated to take five to ten years for completion, for installing colour-light signals, with improved approach lighting, on all main lines. Delays in suburban service have been halved by bringing into use on December 14 last of an additional track between Mount Vernon and Fleetwood, on the Harlem Division.

Modernising N.Y.C. Stock

Much was done by the New York Central System during 1941 towards improving the comfort of its passenger travel. In addition to 32 new streamliner cars for the Empire State Express service, 95 new coaches were

purchased; 111 existing coaches and 11 dining cars were air-conditioned. This company now owns 686 air-conditioned cars and operates 689 air-conditioned sleeping, lounge, parlour, and other cars of the Pullman company. The 1942 New York Central programme includes the air-conditioning of 160 more of its own cars, and the modernisation of 98 suburban coaches. Enquiries are also out for an additional 25 of the latest 4-8-2 type "general utility" engines, of which 50 were built recently; some of these, however, are intended for the Pittsburgh & Lake Erie subsidiary.

Another Contested Branch Closure

Nebraska provides another example of a railway recently closed down by authority of the Interstate Commerce Commission, on the application of its owner, the Chicago & North Western RR., the compulsory reopening of which is now being sought by the State concerned. This is the line, 102½ miles long, from Hastings to Linwood. The ground of the petition, which is being made to the I.C.C. jointly by the State of Nebraska and the Nebraska State Railway Commission, is the changed conditions arising out of the entry of the United States into the war, and in particular restriction on road services caused by the rationing of motorcar tyres. The petitioners suggest that the branch could be operated more economically than heretofore with lighter equipment.

Further Southern Streamliners

In conjunction with the New York Central System, the Southern Railroad is now operating the all-Pullman Florida Sunbeam through between Chicago, Detroit, Cleveland, Toledo, Cincinnati and the Florida coast resorts of Miami and St. Petersburg. The Southern takes over with a 4,000 b.h.p. diesel twin unit at Cincinnati, which works the train through for 730 miles to Valdosta, Ga. The Crescent, a through express between New York and New Orleans by the Southern route, is also worked by a Southern diesel-electric 4,000 b.h.p. unit over the 637 miles between Washington and Atlanta. New all-coach diesel services are also in operation between Birmingham and Columbus, 122 miles, and Sheffield and Parrish, 96 miles, but the Vulcan, on the 295-mile route between Chattanooga and Meridian, has been withdrawn.

ARGENTINA

Aviation Notes

The Ministry of Interior announced on December 9, 1941, that it had approved an agreement between the Sociedad Argentina de Navegación Aeria (SANA) and the Compañía Aeronáutica Uruguaya S. A. (CAUSA), whereby each company is to maintain a service each way, every day (except Sunday), between Buenos Aires and Colonia (across the River Plate in Uruguay). The companies will co-operate mutually with respect to repair and maintenance work, sale of tickets, and administrative and operational matters.

The Department of Posts & Telegraphs has announced that the Aero Club Posadas has been authorised to carry mail and express between Posadas and Puerto Aguirre, in the north-east part of Argentina. Intermediate stops will be made at Puerto Gisela, Puerto Rico, Monte Carlo, Eldorado, and Puerto Bemberg. There are to be three round trips weekly. A postal surcharge of 10 centavos for 20 grams will be made, and the proceeds go to the concessionaire. The concession is considered as non-permanent.

The Ninth Annual Civilian Aviation Conference of Argentina, held under the

auspices of the Comité Argentino Permanente de Aeronáutica, took place at Paraná on December 5 to 8. There were 85 delegates, representing 41 official and unofficial entities interested in aviation. Reports were presented covering a wide range of aeronautical subjects.

The Sindicato Condor Limitada recently announced that its name would be changed to Servicios Aéreos Condor Limitada. The company announced on December 14, 1941, that, as a result of orders received from headquarters in Brazil, the company has decided to cancel its regular air services between Buenos Aires and Santiago (Chile), and between Buenos Aires and Rio de Janeiro. Suspension of these services is attributed to difficulties in obtaining fuel supplies, due to the refusal of the petroleum companies to continue the supply, according to the press.

MEXICO

National Railways Rehabilitation

Since General Enrique Estrada took over the administration of the National Railways system, his vigorous personality has shown itself in all branches of operation, with the due effect on discipline and economy. Under the Decree of April 23, 1938, the operation of the National Railways had been confided to a "workers' administration," but the experiment was not a success, and last year President Avila Camacho under a new law, dated January 7, 1941, appointed General Estrada as general manager, with a new board of direction, consisting of Sr. Roberto Lopez as president, and three government and three union representatives. General Estrada reported to the Senate on March 21, 1941, that the rolling stock position was acute and that 300 of the total of 1,000 locomotives were over thirty years old. New equipment should be ordered at once, and also, he reported, 3,300 kilometres of track should be relaid with new rails of heavier section. For these and other necessary works General Estrada said an amount of 160,000,000 to 200,000,000 pesos would be required within the next five years. Meanwhile, his report added, the railways should be worked on a strictly commercial and sound economic basis, keeping the expenses well within 85 per cent. of the earnings, and limiting the payroll to not more than 48 per cent. of the total expenses. Incidentally, the figures quoted in the report would go some way to explain the failure of the workers' administration.

In consequence of the report a committee was appointed in August, 1941, headed by President Avila Camacho, to consider the reorganisation and financing of the national railways. In September, 1941, the President reported to Congress, adding that 1,000 covered wagons were being built in the United States and that arrangements were nearing completion for the purchase of 50 new locomotives. He confirmed that the government had decided to guarantee the expenditure of up to 200,000,000 pesos for the rehabilitation of the railways, including the completion of the National of Tehuantepec, an inter-oceanic line connecting Coatzacoalcas on the Gulf of Mexico with Salina Cruz on the Pacific, a distance of 303 kilometres. This trans-isthmus line is being prepared as a strategic route for traffic during an emergency.

Meanwhile the returns for the first eight months of 1941 show an improvement in traffic, over the same period in 1940. Gross earnings amounted to \$112,805,154, compared with \$104,069,344, an increase of 8.39 per cent. The rise was mainly in

freight earnings, as passenger receipts declined. On the other hand, operating expenses rose in the same period from \$92,787,219, to \$94,204,129. Net railway operating revenue increased from \$16,430,750 in 1940 to \$18,601,024 in 1941; the working ratio fell from 84.96 per cent. to 83.51 per cent. Including certain incidental charges, the working ratio was 86.05 per cent., which is still higher than the 85 per cent. stipulated in the new law.

SWITZERLAND

Motor Passenger Vessel for Lake of Thun

Some particulars of the motorship *Thun* recently constructed at Zürich by Escher Wyss for the Berne-Lötschberg-Simplon Railway Company's service on the Lake of Thun, are given in the *Escher Wyss News*. The vessel has a length of 128 ft. 6 in., a maximum beam of 16 ft. 6 in. and a moulded depth of 8 ft., the draught exclusive of the keel, is 3 ft. 9 in. It is equipped with a 250/300-h.p. Sulzer diesel engine driving a variable-pitch propeller; reversing and speed control is obtained by alteration of the blade angle. The vessel is fitted with both bow and stern rudders operated from the wheel-house by chains. A change-over device enables the steering to be changed from one rudder to the other; the one not in use is locked. The designed speed, when carrying 300 passengers, is 23 km. per hr. (12.4 knots), and the fuel consumption is stated to be 7.4 lb. of gas-oil a nautical mile. The vessel carries a crew of three men. The hull of the *Thun* was transported by road in two sections from Zürich to the western end of the Lake of Thun, a total distance of 60 miles. The largest section was 66 ft. long and weighed 14 tons. The shell of the vessel was completely welded up to the deck stringer at Zürich.

GERMANY

The Baltic Ferry Services

From January 5 the freight rates for the ferry services to Scandinavia, namely, Sassnitz-Trelleborg and Warnemünde-Gedser, were increased by varying amounts for traffic leaving Germany; in the return direction no increases have been introduced. The reason for this measure is explained by the Reichsbahn to be to give relief to the railway traffic by diverting outgoing Scandinavian traffic to sea routes via Bremen, Hamburg, Lubeck, and Stettin. Another measure with the same aim is that goods for destinations in Scandinavia east of the Great Belt are no longer accepted for transport by rail via the Schleswig-Denmark routes.

The Central European Railway Association

The Verein Mitteleuropäischer Eisenbahnverwaltungen, always under the leadership of the Reichsbahn, had 122 member railways, operating 130,600 km. (81,150 miles), at the beginning of 1942. The principal increases were 5,842 km. (3,630 miles) of railway in the Protectorate of Bohemia & Moravia, included on January 1, 1941; 4,531 km. (2,815 miles) in the Krakow directorate; and 2,000 km. (1,243 miles) of Hungarian lines in seized territories. Member administrations pay a membership fee of 200 marks, plus 1 mark per km. A special fee of 100 marks is paid by railways operating less than 100 km. At the beginning of 1941 there were said to be 123 member administrations, State

and other railways, with about 117,000 km. (72,700 miles) of railway.

SLOVAKIA

Bratislava Port Developments

The port of Bratislava on the Danube is now an important interchange point between rail and water traffic. It was greatly improved during the years of Czechoslovak independence, as may be judged from the following particulars, which belie the German pretensions that progress in Slovakia was consistently neglected by the Czech Government. Under the Austro-Hungarian regime the port was of little importance, and consisted of only two basins used chiefly by Danube boats laid up during the winter. It had 7 km. of railway sidings, five small warehouses, and only one crane. Under Czech rule, 5,400 m. of quays, 36 km. of railway sidings, and 17 modern warehouses of several floors in height, each provided with cranes, grain elevators, and oil storage and transshipment installations, were built. The annual shipping, which in 1913 amounted to 41,000 tons, increased to 177,000 tons in 1921, 785,000 tons in 1931, and 1,012,000 tons in 1939.

DENMARK

Rolling Stock on State Railways

Rolling stock of the Danish State Railways is now being fitted with the German Kunze-Knorr brake. The goods wagon stock, only part of which was formerly fitted with hand brakes, was taken in hand not long after the German occupation of Denmark, and will be completely fitted within the next few months. A beginning has been made with the conversion of the vacuum brake on passenger stock. The first batch of converted locomotives, carriages, and vans will be placed into service on the Zealand and Falstar islands lines; these are to be followed by the Funen island lines, and finally the mainland stock will be dealt with. The electric rolling stock is not affected, as it has always been equipped with compressed air brakes. The conversion of the passenger stock is expected to be completed in four years from now. The plan is being carried out with the active support and assistance of the German authorities. It is obviously of great importance for the interchange of rolling stock with the Reichsbahn and the railways in other occupied territories.

SWEDEN

The Dalsland Railway

At the beginning of this year, the Dalslands Railway Company, owning the electrified standard-gauge line from Mellerud to the Norwegian frontier at Kornsjö, 65 km. (40 miles) long, was taken over by the Gothenburg-Falun Railway Company, and has thereby become Swedish owned; three-fourths of the Dalslands Railway Company's shares were in Norwegian possession. The Dalslands line and the Mellerud-Gothenburg section of the Gothenburg-Falun Railway are used by the Oslo-Gothenburg-Malmö through trains. Both lines are now operated by the Swedish State Railways under agreement with the owner companies.

The Dalsland Railway has a total length of 71 km. (44 miles), of which 65 km. are electrified. Its rolling stock recently comprised 6 steam locomotives, 3 electric locomotives, 9 carriages, 134 wagons, 1 electric railcar, and 2 petrol railcars.

THE RAILWAYS OF THE NETHERLANDS EAST INDIES

A brief account of the extent and equipment of the State and private lines in Sumatra and Java

THE Dutch islands empire of the East Indies has an important railway system in its main island of Java and three smaller ones in Sumatra. They comprise both State and private company lines, the former managed from head offices in the Indies, and the most important of the latter from head offices in Holland, duplicated by operational headquarters in the Indies.

The Sumatra Systems

The island of Sumatra has three isolated railway systems. The one in South Sumatra, 645 km. (401 miles) of 3 ft. 6 in. gauge railway, consists of a main line from the port of Oosthaven to Kertapati terminus (opposite Palembang on the Musi river), and a branch line to the South Sumatra coal fields; this is a State Railway system. A second State Railway system of 3 ft. 6 in. gauge lines is based on Padang in West Sumatra to serve the coal producing areas; it is 264 km. (164 miles) in length. The third system, the most important, includes the Deli Railway Company's system of 540 km. (336 miles) based on Medan, and the State light railway system, of 2 ft. 5½ in. gauge, 512 km. (318 miles) long, in Atjeh province. Transhipment facilities between these two systems are available at the break of gauge station of Pangkalansusu.

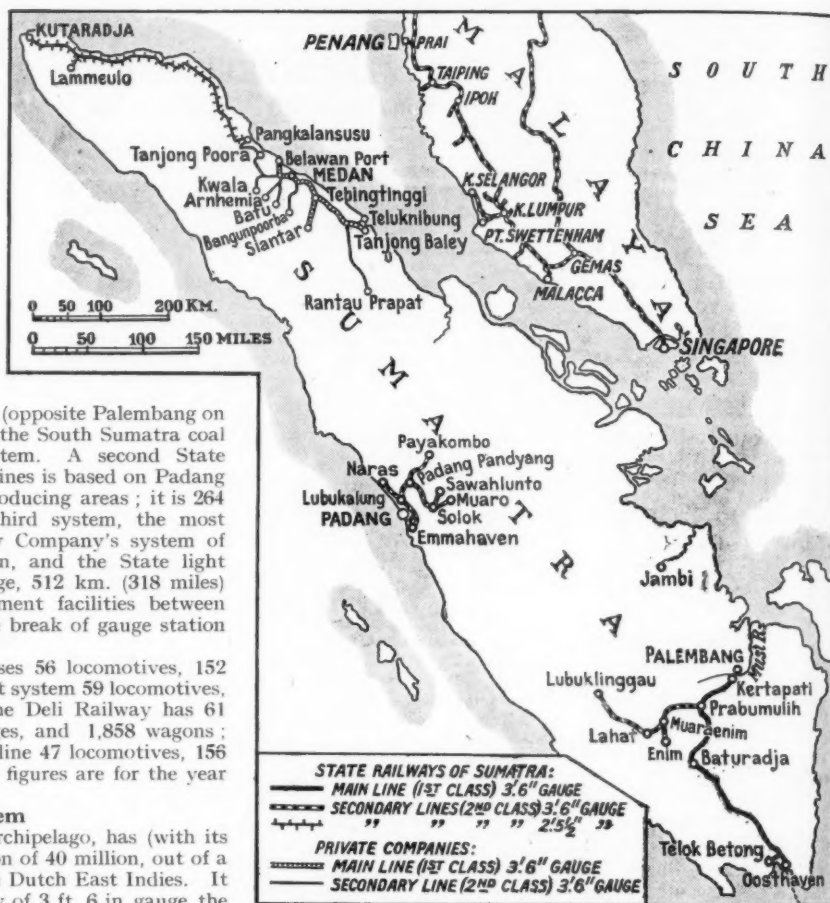
The South Sumatra system possesses 56 locomotives, 152 carriages, and 1,250 wagons; the West system 59 locomotives, 137 carriages, and 1,010 wagons; the Deli Railway has 61 locomotives, 9 railcars, 224 carriages, and 1,858 wagons; and the narrow-gauge State Railway line 47 locomotives, 156 carriages, and 1,031 wagons. All the figures are for the year 1940-41.

The Java System

Java, the principal island in the archipelago, has (with its satellite island of Madura) a population of 40 million, out of a total of 60 million in the whole of the Dutch East Indies. It has a complete railway system, mostly of 3 ft. 6 in. gauge, the total mileage of which is as follows:—

4,857 km. (3,018 miles) ...	3 ft. 6 in. gauge, 2,850 km. (1,771 miles) of which are State Railways
261 km. (162 miles) ...	4 ft. 8½ in. gauge, private companies
279 km. (173 miles) ...	1 ft. 11½ in. gauge, all State Railways

The railways are classified as first class or main lines, and second class or secondary lines. The differences are in standards of construction, safety regulations, and permissible speed. On the secondary lines the speed limit is 60 km.p.h. (37 m.p.h.). There is no restriction on the use of main-line rolling stock on secondary lines, and through trains are operated between the two classes of railway. Two main trunk lines run from west to east between Batavia (the capital) and Soerabaya (the second city and port). At three points these trunk lines are linked by north-south lateral main-line connections, one of which (the most easterly one), from Semarang to Djogja, is the only standard-gauge line in the colonies. The southern trunk line is operated by the State Railways throughout, exercising running powers over the 37-mile Djogja-Solo section of the Netherlands Indies Railway on a second (narrow-gauge) track alongside the owner-company's own standard-gauge track. The northern trunk line consists of a State Railway from Batavia to Cheribon, one third of the way; the Semarang-Cheribon Railway main line for the second third; and the Netherlands Indies Railway's narrow-gauge main line for the last third. A break exists at

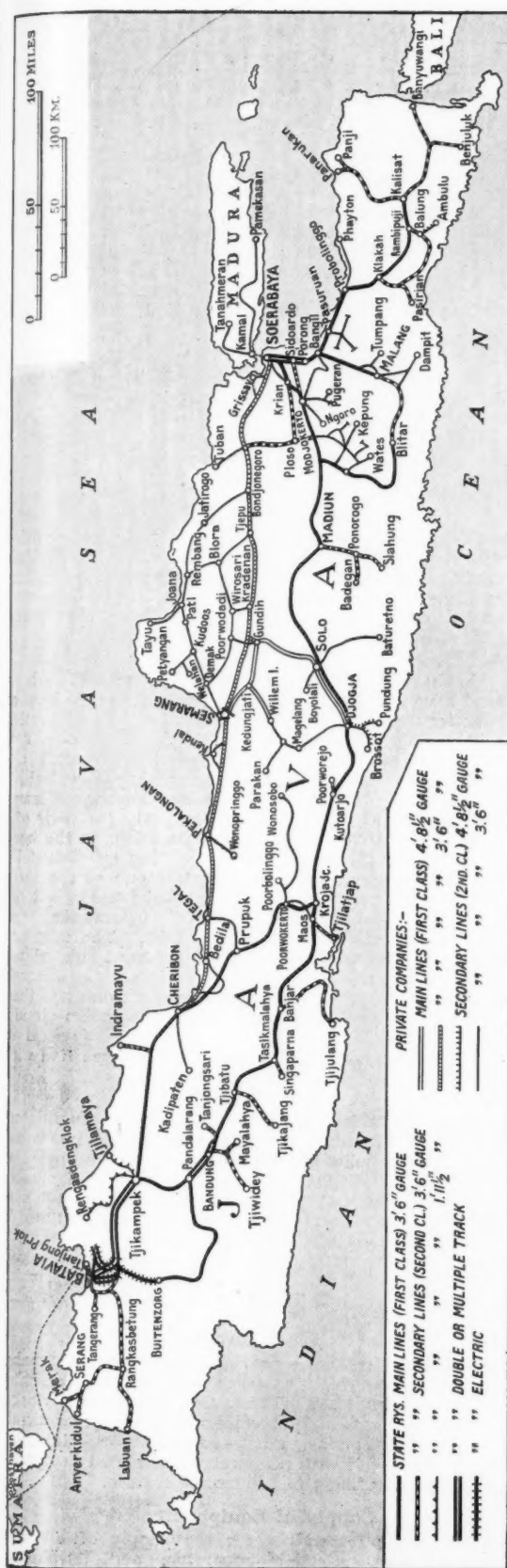


The railways of Sumatra

Semarang, where up to the present no connection for passenger trains has been made between the two private company's stations. There is a third station in the same town, the terminus of a third private company, the Samarang-Joana Railway.

From each end of the west-east trunk lines, main and secondary lines reach the farthest corners of the island, and from Soerabaya a boat service connects the Java system with the Madura Railway. Connection with the South Sumatra Railways, on the second important island of the Indies, is maintained by a daily service of steamers from Merak, as well as a twice weekly service from Tandjong-Priok, the port of Batavia, both operated by one of the large Dutch Indies steamship companies. The six principal cities in Java are all on the trunk lines, namely, Batavia (population 350,000) Soerabaya (250,000), Solo, Semarang, Bandung, and Djogja (all near the 150,000 mark).

In the Batavia district, 80 route-km. (50 miles) are electrified. Three main line sections, Batavia-Tjikampek, Soerabaya-Porong, and Padalarang-Bandung to two stations west of Bandung, have double track, as well as the Batavia suburban circle line. The Batavia to Tandjong Priok line has four tracks between Antjol Junction and Tandjong Priok. The total



The railways of Java, showing gauges, classification, and State or private ownership

double track mileage is 206 km. (128 miles) and that of four tracks 4.4 km. (2 1/2 miles).

Fast services by through trains, or through carriages with immediate connections at junctions are run through the island, connections at Semarang include provision by the railways of transport facilities between the stations for passengers and luggage. The most important services are two pairs of express trains between Batavia and Soerabaya, *via* Cheribon, Kroja Junction, Djogja, and Solo, one daylight and one night express each way, composed of air-conditioned bogie stock with dining and sleeping cars. Next in importance are four pairs of fast express trains between Batavia and Bandung, and an hourly service of fast expresses between Soerabaya and Malang during daylight. On other routes liberal services of through trains with dining or buffet cars are provided. On the trunk lines the speed is high, and the Java railways hold the record for scheduled regular speeds on narrow-gauge lines. The best speeds are obtained on the Batavia-Soerabaya daylight expresses, which cover the 512 miles, with 10 intermediate stops aggregating 43 minutes, in 11 1/2 hours at an average speed of 44 m.p.h., stops included. The highest start-to-stop speeds are reached on the following sections:—

Batavia—Tjikampek...	50 miles in 60 min., speed 50 m.p.h.
Cheribon—Prupuk...	46.6 miles in 55 min., speed 50.8 m.p.h.
Solo—Madiun...	61 miles in 72 min., speed 50.8 m.p.h.

Running speeds of 60 m.p.h. are reached at several points for considerable distances. The longest non-stop run in the islands is from Kroja to Djogja, 87 1/2 miles in 1 hr. 46 min., at an average speed of just under 50 m.p.h. With the exception of the through expresses, passenger services are generally confined to daylight hours, beginning between 4 and 5 a.m. and ending about 7 p.m.

Java being a great production centre of sugar, rice, tea, coffee, copra, tobacco, cassava, and condiments, has an extensive goods traffic by rail of these products from plantations and refineries to the principal markets and ports. The sugar traffic is preponderant and a large fleet of tank wagons with the exception of a few special vehicles have four wheels, and are of rather low carrying capacity, with a maximum axle load of 15 tons. On most of the main lines up to five or six goods trains are run daily, and in the production seasons they are made up to weights of 1,500 tons behind the tender, but the normal weight is around 1,000 tons, reduced to 600 tons on the mountain sections. The normal length of long distance goods trains is 60 wagons, increased in times of heavy traffic to 100 wagons.

Rolling Stock

There are in all 959 3 ft. 6 in. gauge locomotives, of which 543 are State Railway owned; 57 of standard gauge, all private company owned; and 18 narrow-gauge State Railway locomotives, in use on the Java lines. They are of various types, of which the most important are Mallet engines, 2-8-8-0 and 2-6-6-0 compound tender, 0-4-4-2 compound tank engines, 4-6-2 four-cylinder compound and two-cylinder simple passenger tender engines, 4-6-0 and 4-4-0 passenger tender engines, 4-4-2 and 4-6-4 passenger tank engines, and 2-8-0 and 2-6-0 goods tender engines, with small numbers of other wheel arrangements.

The combined passenger stock consists of 2,514 3 ft. 6 in. gauge carriages, 99 standard-gauge, and 59 narrow-gauge; of these, 1,751 3 ft. 6 in. gauge and the 59 narrow-gauge coaches are State owned. The carriages have four classes. Dining and sleeping cars are available only for first and second class passengers; the fourth class is for cheap coolie travel. In addition, the State Railways have 25 electric motor coaches and 26 trailers for their Batavia services, and 13 electric locomotives for main-line trains in that district.

The goods stock consists of 20,220 3 ft. 6 in. gauge wagons, 1,758 standard gauge and 190 narrow gauge; of these, 14,359 of the 3 ft. 6 in. gauge and all narrow-gauge vehicles are State Railway owned.

Staff

The total railway staff in Java numbers approximately 40,000. Large numbers of Europeans occupy all leading positions and many of the lower grades; the proportion is exactly three times as high as that on the Federated Malay States Railways, a comparable system.

NEW L.N.E.R. SCOTTISH AREA TRAFFIC CONTROL OFFICE

Modernised and extended facilities in a central location which were brought into use on November 23 last

THE original traffic control office for a District of the L.N.E.R. (Scottish Area) was at Coatbridge, but, as this was somewhat remote from the District Superintendent's Office, it was decided to transfer the location of the control and at the same time modernise and extend the facilities. The new Control Office was opened on November 23, 1941. The arrangements now comprise new tables with new keyboards giving access to three new direct selective circuits connecting selective way-stations together with selective apparatus operating over trunk lines connecting control circuits in addition to local circuits operating direct from the keyboards by ordinary code ringing. Previously manual exchanges existed at three points, connected by trunk lines to the old control office at Coatbridge, but these have now been closed and the trunk lines extended through to the new office.

Trunks and Coupling Units

The local omnibus circuits formerly terminating in two of the manual exchanges, and the old Coatbridge control are now divided into groups of two, three, or four, and one trunk line allotted to each group. Connection between any circuit in the group and the new control office over the allotted trunk line can be obtained from either end by means of an automatic coupling unit situated in the same location as the old manual exchanges and control. The coupling unit consists of a "line-circuit" set of four relays per circuit and a rotary "line-finder" selector switch with associated relays for each trunk termination. The control initiates outgoing calls by dialling impulses over the trunk, which steps the selector switch on to the desired circuit. The required way-station is obtained by code ringing over the trunk, which, by means of a ringing repeater, rings out on the circuit. After the circuit has once been coupled, the connection cannot be broken into by a way-station on any other circuit, and the selector switch remains in that position until a special train of impulses (five or more) is dialled by the control, thereby restoring the coupling unit to its normal position. In this manner omnibus circuits are connected to the control office over trunks.

Selective Circuits

In order to provide an independent circuit to every section of the main line in the area concerned, three special circuits have been installed, each covering roughly a third of this section. Existing lines were used where possible, and new wires were erected to extend them to the control office. The Standard Telephone Company's selective ringing telephone system is used, whereby only the bell of the particular station required is rung, although every way-station is connected on the same line as in an ordinary omnibus circuit. This is effected by using a selector relay at each telephone in the form of a rotating 17-position switch driven by mechanical pawls from an electro-magnet. A $3\frac{1}{2}$ -cycle impulsing current is fed out from the control office in three portions with two inter-digital pauses; the total number of pulses for a call is 17.

An arrangement of mechanical stop pins on the selector ensures that only one relay completes the full number of steps when a particular code is sent out, the others simply falling back to normal. The bell is operated from a local battery and the selector restored to normal on the last impulse. Each station has a different dial code number and it is only necessary for the control to dial two digits and the impulse storing and sending relays in the equipment then take over and send out the $3\frac{1}{2}$ -cycle current at 120 volts.

Calling in is effected by means of a calling button on each selective telephone, which short-circuits the line. A voltage of approximately 30 V stands normally on the lines fed through a calling relay at Glasgow, and when the loop is applied this relay operates and lights the calling lamp for that circuit. A special "general call" button at the Control may be used to call every station simultaneously. This is

effected by sending out 17 continuous impulses, thus operating every selector relay to its ringing position.

Local Circuits

All the existing 23 local circuits have been extended to the new control and terminate on keys with calling lamps and line relays. By pressing the "control" ringing button, way-stations on those circuits can obtain direct access to the control and conversely the control can obtain any way-station by operating the code-ringing button mounted on the keyboard.

Telegraph Office

Six of the control trunks and ten of the local control circuits have been extended to the telegraph office, and arrangements made whereby incoming calls can discriminate between the control and the telegraph office. In the case of circuits coupled over trunks, this is effected by using the ordinary button on the telephone instead of the control button and holding in for 5 seconds. This brings into use a special relay on the coupling unit which reverses the polarity of the ringing pulse sent over the trunk. At the control office this operates a special calling relay which calls the telegraph office only. In the case of local circuits, the method of calling is identical, but the time element relay circuit is located in the telegraph office equipment and lights the calling lamp direct.

Keyboards

The keyboards with which the control room has been equipped have sloping fronts and are raised above the level of the desks for ease of viewing and operation. Six "sectional" desks have only the circuits required for their own use, up to 10 keys; the rest of the desks have all circuits. The keys are in two rows with white calling lamps and orange busy lamps above each key; these lamps are wired in parallel round all the tables. The throwing of a key to the "speak" or "dial" position brings in the busy lamp for that circuit on all desks. Ringing is effected by throwing the required key and operating one of the three common ringing pushes on the left-hand side, lettered "OMK" for local circuits, "CRK" for trunks, and "GCK" for selective circuit general calls. The standard auto-telephone dial is fitted on the right-hand side of the keyboard. The speaking circuit is wired in cascade through all the keys, so that it is not possible to speak on more than one circuit at a time. A high-efficiency transmission circuit, fed from the 50-V supply through choke coils, is used in conjunction with a standard hand micro-telephone fitted with plug and jack.

Power Supply

At the control office a 50-V central battery of accumulators is trickle charged from the mains by means of selenium metal rectifiers. This supplies the ringing out current and operates all the relays in the trunk and local equipment. A smaller capacity 120-V battery, similarly charged, supplies the current for the selective circuits. The calling lamp load at 6 V is normally obtained from a transformer on the mains, a "power-off" relay being provided which transfers the load to a standby 6-V accumulator battery in the event of a mains failure. This battery is also kept in condition by trickle charging.

Phantom Circuits

Two phantom circuits are provided, making use of trunks, specially designed high-resistance coupling coils being included in the circuit at each end. One circuit terminates on the keyboards at the control office, while the other circuit terminates on a telephone at that end and two telephones at the control office end with polar relays connected in opposition, thereby providing a discriminating feature.

Supply of Equipment

The contractor responsible for the supply of all new tables, keyboards, selective apparatus, and telephones.

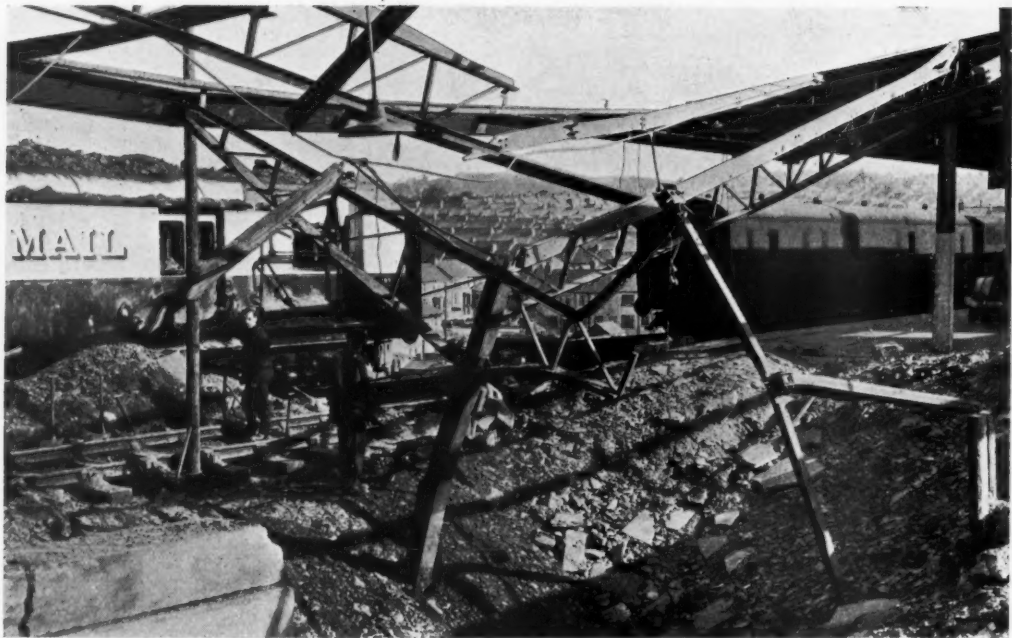


New L.N.E.R. Scottish Area traffic control office, which was brought into use on November 23, 1941, showing guard's relief, low relief, and spare desks

together with the control room wiring, was the Standard Telephones & Cables Limited. The outside line construction work, cabling, and way-station installations were carried out by the railway company's signal & telegraph staff. The scheme was prepared to meet the requirements of the Superintendent, L.N.E.R. (Scottish Area), and the work was carried out to the instructions of the Engineer, L.N.E.R. (Scottish Area), and under the immediate supervision of the Signal & Telegraph Engineer, L.N.E.R. (Scottish Area), and his staff.



View of the new L.N.E.R. Scottish Area traffic control office, showing sectional desks and Deputy Chief Controller and clerk's desk



A view of the damaged roof after explosion of bomb on stairway leading to subway



Another view of the damage to the roof after the explosion of the bomb showing the stairway leading to subway

BOMB DAMAGE TO A WELDED STATION ROOF

(See article on opposite page)

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BOMB DAMAGE TO A WELDED STEEL ROOF

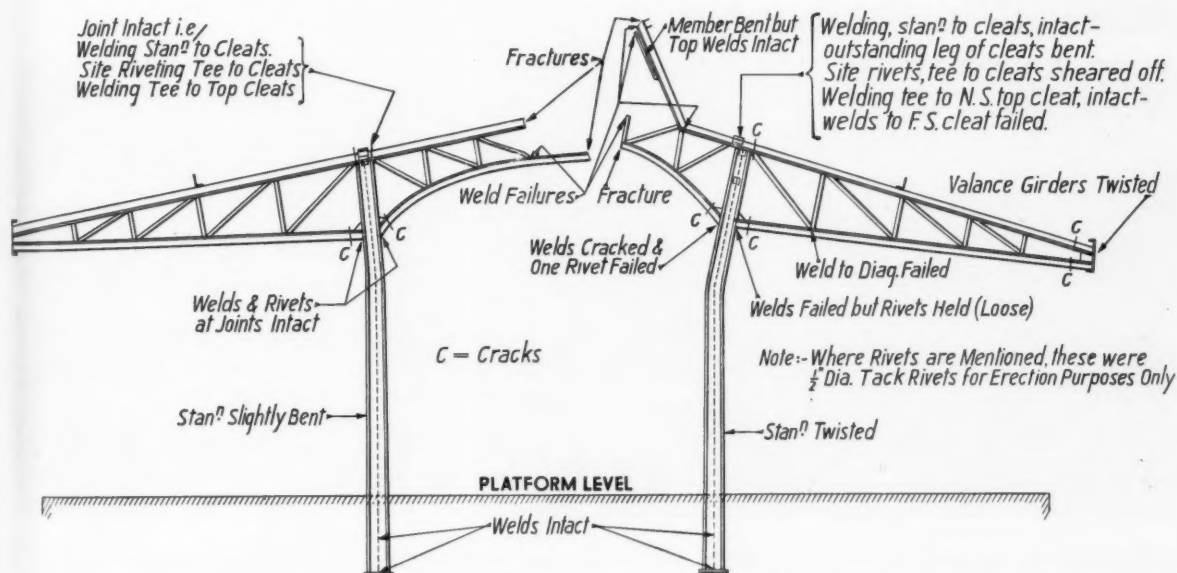
Some notes on the damage during an aerial bombardment of a recently-constructed welded steel platform roof



Welded steel roof under construction

DURING one of the air raids of 1941 the recently-constructed welded steel platform roof of a Great Western railway station was damaged by a bomb, which fell through it, piercing the roof covering, which was of Robertson's Protected Metal, and exploding on the steps leading down to a subway. Thus blast was responsible for the damage, the extent of which is indicated in our illustrations. The average height of steelwork above the level where the bomb detonated was about 11 ft. A length of 60 ft. of the roofing was damaged, and had to be rebuilt. It comprised one roof truss with its attendant uprights, longitudinal girders, and intermediate members. The damaged roof truss was almost directly over the position of detonation. The two vertical uprights supporting the roof were of tapered shape, made from B.S. beams cut through the centre of the web and welded with a single V butt weld. These

uprights taper from 10 in. over the flanges at the bearings to 6 in. over the flanges at the extreme top, and are about 16 ft. overall. Although the uprights were both bent and twisted, the weld was found to be undamaged. The roof trusses and longitudinal girders were composed of small T sections for the principal members, with $1\frac{1}{2}$ in. square and $1\frac{1}{2}$ in. by $\frac{3}{4}$ in. diagonal web members. The sketch reproduced shows the distortion and damage to trusses and uprights. Longitudinal girders, 31 ft. in length and 2 ft. deep, spanning between the uprights were bent and twisted in their length, but no weld joint had failed. It will be observed that some of the weld joints to the diagonal members in the truss withstood the secondary damage caused by distortion. In all, only 16 per cent. of the welded joints were either broken or cracked, which is a tribute to the type of construction and the workmanship.



Sketch of cross-section of welded steel platform roof, indicating damage caused by explosion of bomb in stairway leading to subway almost directly underneath



A steam-hammer block—85 tons of solid steel, measuring 12 ft. 6 in. \times 8 ft. \times 6 ft.—contributed as scrap to the war effort by a works near London, being moved to the steel breakers on a G.W.R. 24-wheel girder wagon, which itself weighs 82 tons and can carry up to 120 tons



Left: Mr. Robert Holland-Martin, Chairman, Southern Railway Company, presenting a gold medal to Miss E. M. Tucker at Deepdene Hotel, for passing ambulance examinations for twenty-one consecutive years



The naming ceremony on March 27 of the fifth of the Southern Railway Merchant Navy class locomotives "Canadian Pacific." Left: During the ceremony (left to right) Mr. E. J. Missenden (General Manager, Southern Railway), Sir Alan Anderson (Chairman, Railway Executive Committee), Mr. R. Holland-Martin (Chairman, Southern Railway Company), Mr. F. W. Mottley (Acting European Manager, Canadian Pacific Railway), Captain R. N. Stuart (General Manager, Canadian Pacific Steamships Limited), Mr. O. V. Bulleid (Chief Mechanical Engineer, S.R.), Mr. J. Bridger (Stationmaster, Victoria, S.R.). Right: The locomotive

RAILWAY NEWS SECTION

PERSONAL

The King has approved that the dignity of a Barony of the United Kingdom be conferred on Lt.-Colonel the Rt. Hon. J. T. C. Moore-Brabazon, M.C., M.P., lately Minister of Aircraft Production, and Minister of Transport from October, 1940, to May, 1941.

The Minister of Supply, Sir Andrew Duncan, has appointed Mr. R. B. Tippetts, Mr. T. Channing-Pearse, and Mr. E. B. Simmons to be his Private Secretaries.

Mr. Ralph Assheton, Joint Parliamentary Secretary, Ministry of Supply, has appointed Miss M. Sabel to be his Private Secretary.

Mr. C. U. Peat, Joint Parliamentary Secretary, Ministry of Supply, has appointed Miss E. L. K. Ross to be his Private Secretary.

Mr. James V. Rank has been elected a Director of the Great Western Railway Company. He is Managing Director of Joseph Rank Limited and of Ranks Limited, and Chairman of Ranks (Ireland) Limited.

The Directors of the Birmingham Small Arms Co. Ltd. announce that Mr. H. J. S. Moyses has been elected a Director. Mr. Moyses is Managing Director of Birmingham Railway Carriage & Wagon Co. Ltd., and is a member of the Council of the Federation of British Industries.

We regret to record the death on March 31 of Mr. Edward Brocklehurst Fielden, in his 85th year. Mr. Fielden was the Deputy Chairman of the London Midland & Scottish Railway Company from 1923 to 1940. His family has long been associated with railways, and one of his ancestors was present 107 years ago at a meeting which resulted in the formation of the Manchester & Leeds Railway. Mr. Fielden joined the board of the Lancashire & Yorkshire Railway Company in 1897, became Deputy Chairman in 1903, and succeeded the late Sir George Armitage as Chairman in September, 1918.

We regret to record the death of Mr. Owen Richard Williams, who passed away peacefully on March 23, after a few months' illness. He was the second son of the late Henry Williams of Cathcart, Glasgow, and graduated from the Glasgow University with the degree of B.Sc. in Engineering, and entered his father's firm, Henry Williams Limited. He started business on his own account about 20 years ago and eventually formed the firm of Llewelyn Wynn-Williams Limited, of which he was Managing Director. Mr. Williams was the inventor of a number of permanent-way appliances including point levers, stretcher bars, etc. He was a member of the Permanent Way Institution and of the Institution of Railway Signal Engineers.

Mr. F. W. Showers, Surveyor & Estate Agent, G.W.R., who, as recorded in our issue of February 27, retired on March 31 after 54 years of railway service, was born in January, 1872. From 1888 to 1892 he was in the Traffic Department of the Great Northern Railway Company and was then transferred to the Surveyor's Office, and after four years at King's Cross went to Manchester to represent the Surveyor in connection with the purchase of property

the settlement of the cumulo assessments. For many years he has been a member of the Rating Surveyors' Association and the Association of the Railway Rating Surveyors. On many occasions Mr. Showers was Chairman of the Railway Estate Agents' Conference and he was nominated by the Railway Executive Committee as Chairman of the Surveyors' Committee. He was mainly responsible for the formation of the Great Western Garden Village Societies which provided houses for more than 1,600 railway employees and was Chairman of the London Society from its inception. Mr. Showers is a Director of the Welsh Town Planning & Housing Trust Limited, and Western Enterprises Limited. He plays his part in local government as a member of the Bradfield Rural District Council and the Newbury Assessment Committee. The Minister of Health appointed him a member of the Rural Housing Committee which was set up to advise the Minister as to grants for rural houses.

Sir Henry Mather-Jackson, whose death we recorded in our last week's issue, apart from his directorship of the Great Western Railway Company and former Chairmanship of the Newport Alexandra Docks & Railway Company, had a number of industrial and overseas railway connections. He had been Chairman of the Grand Trunk Railway of Canada, and director of the United Railways of Havana, Cuban Central Railway Company, Western Railway Company (Cuba), Powells Tillery Co. Ltd., John Lancaster Steam Coal Co. Ltd., and the Ebbw Vale Steel, Iron & Coal Co. Ltd. At one time he was a director of the Rhymney Railway Company.

Mr. Henry Augustus Green, Managing Director of Murex Limited, who died intestate, has left £219,088.

For the second time, Mr. A. V. Clark, former Manager of the C.P.R. office in Paris, is a prisoner of war; he is in the prison at St. Denis, near Paris. When the German invasion swept across France in 1940, Mr. Clark was crowded off the last boat to England. He was soon picked up by the Germans and held as a civilian prisoner of war. In December, 1940, he was interned in the prison camp at Drancy, Paris. His wife was interned elsewhere in a women's camp. In October, 1941, he was transferred from Drancy to the St. Denis prison, where he was visited by his step-daughter who reported that he was in perfect health. Mrs. Clark has now been released from internment. Mr. Clark is the only British member of the C.P.R. European staff to be a prisoner of war. He entered the company's service in 1906 as passenger clerk. During his first few years he became Chief Clerk to the General Passenger Agent, and in 1911 was appointed assistant to the agent for Belgium at Antwerp. From 1912 to 1914 he was Accounting Agent at Vienna. He joined up for war service



Gilbert

Adams

Mr. F. W. Showers

Surveyor & Estate Agent, Great Western Railway, 1922-42

for the Great Northern Deansgate Goods Depot. In 1899, he returned to London and the rating work was added to his other duties. In 1903 Mr. Showers became Chief Assistant to the Surveyor, and was also made responsible for the rating of the whole of the Great Northern system. Mr. Showers joined the Great Western Railway in 1907 as Assistant Rating Agent, and was appointed Rating Agent in 1913. In 1919, he was appointed Assistant to the General Manager; in 1921, he became Principal Assistant to the General Manager; and in 1922 was made Surveyor & Estate & Rating Agent. Mr. Showers has made a special study of rating matters in relation to railways and his articles published some years ago in the *Great Western Railway Magazine* constitute a complete exposition of an intricate subject. He took a prominent part in the important negotiations which preceded the passing of the Railways (Valuation for Rating) Act, 1930, and subsequently in

and before the end of 1914 found himself a prisoner of war, but underwent such hardships that he was released on medical grounds in 1915. After recovery, he became personal secretary to the European General Manager in London on March 1, 1916. He also served as Secretary to the late Lord Shaughnessy when the company's President visited England during the war period. Mr. Clark became special representative for the company on the continent in 1920, travelling widely over the European territory and restoring business threads broken by the war and its aftermath. He has been in charge of the Paris office since 1922.

Mr. H. G. H. Read, Assistant (Road & Air Transport & General), Chief Commercial Manager's Department, L.M.S.R., who, as



Mr. H. G. H. Read

Appointed Assistant to Chief Commercial Manager (Passenger), L.M.S.R.

recorded in our March 20 issue, has been appointed Assistant to Chief Commercial Manager (Passenger), entered the service of the L.N.W.R. in 1907; he served first in the Goods and next in the Passenger Departments. He joined H.M. Forces in August, 1914, and served successively with the Royal Naval Volunteer Reserve, the Royal Naval Air Service, and the Army, and was mentioned in despatches. He retired from the Army in 1919 with the rank of Major; he held the appointment of Deputy Assistant Director of Inland Water Transport in France. After a period in the Department of the General Superintendent (Passenger Commercial), when he was concerned among other matters with the rates and charges proceedings before the Railway Rates Tribunal in 1927 and the application to Parliament by the railways for road transport powers in 1928, Mr. Read was appointed in 1931 Assistant District Passenger Manager, London, Road Transport Assistant to Chief Commercial Manager 1932, Road & Air Transport Assistant in 1936, and Assistant (Road & Air Transport & General) in 1938. His responsibilities in the last named appointment embraced the Claims Departments of the L.M.S.R. He has held the appointment of Commercial Manager, Railway Air Services Limited and has been Chairman of Isle of Man Air Services Limited. He has been also a Director of other air transport com-

panies. Mr. Read is a Director of the Yorkshire Traction Co. Ltd., Yorkshire Woollen District Transport Co. Ltd., and Hebble Motor Services Limited, and a member of the Railway & Municipal Corporation Joint Omnibus Committees at Sheffield, Huddersfield, Halifax, and Todmorden. He has occupied the Chair in the L.M.S.R. recurring annual terms at Sheffield, Huddersfield, and Halifax, and is currently Chairman of the Sheffield Committee. He is a Member of the Institute of Transport.

Mr. W. Hanlon, Assistant to Chief Commercial Manager (Goods), L.M.S.R., who, as recorded in our March 13 issue, has been appointed Assistant Chief Commercial Manager (Goods), entered the service of the Midland Railway in 1901 in the Goods



Mr. W. Hanlon

Appointed Assistant Chief Commercial Manager (Goods), L.M.S.R.

Manager's Department, and became Chief Clerk of the Accommodation & Canvassing Office in 1919. In 1925 he was appointed Assistant to the District Goods Manager at Warrington, L.M.S.R., which post he held until 1926, when he assumed control of the then Chief Goods Manager's newly enlarged Development Section at Euston. In this position Mr. Hanlon took a prominent part in the experimental work which led to the establishment of the container system on the British railways, and he was also associated with the introduction of country lorry services on the L.M.S.R. In 1930 his responsibilities were extended to the Chief Goods Manager's Canvassing Department, and in the L.M.S.R. reorganisation of 1932 he was made Assistant (Development & Canvassing). In October, 1933, he was made Assistant (Research) in charge of the new department established for undertaking commercial research.

L.N.E.R. APPOINTMENTS

Mr. A. F. Moss, Goods Agent, Newcastle Forth, to be Acting Assistant District Goods Manager, Newcastle.

Mr. J. Beeston, Goods Agent, Bishops-gate, to be Acting Goods Agent, Newcastle Forth Goods Station.

Mr. R. Coulson, Goods Agent, Marylebone, to be Acting Goods Agent, Bishops-gate.

G.W.R. APPOINTMENTS

Mr. A. V. R. Brown, Divisional Superintendent, Chester, to be Divisional Superintendent, Birmingham, *vice* Mr. W. E. Hart, retired.

Mr. H. H. Swift, New Works Assistant to Superintendent of the Line, Paddington, to be Divisional Superintendent, Chester.

Mr. C. W. Powell, Assistant Divisional Superintendent, Paddington, to be Assistant to Superintendent of the Line, Paddington.

Mr. L. J. Hamblin, Assistant Divisional Superintendent, Cardiff, to be Assistant Divisional Superintendent, Paddington.

Mr. H. F. J. Page, Assistant, Assistant Superintendent of the Line's Office, Cardiff, to be Assistant Divisional Superintendent, Cardiff.

The above appointments date from May 1, and the following appointments date from April 1:

Mr. R. G. Scarsbrook, Estate Assistant, Paddington, to be Principal Assistant to the Surveyor & Estate Agent, Paddington.

Mr. D. J. Jones, Valuation Assistant, Paddington, to be General Assistant to the Surveyor & Estate Agent, Paddington.

MANSION HOUSE ASSOCIATION ON TRANSPORT

The annual luncheon of the Mansion House Association on Transport was held on March 24, and a report of the proceedings appears at page 469. Mr. W. H. Gaunt, President of the association, was in the Chair.

Among those present were: Mr. F. E. Bailey; Capt. C. Barrington (Director, Road Haulage Services, Ministry of War Transport); Messrs. C. A. Birtchell (Principal Assistant Secretary, Ministry of War Transport), F. G. Bristow, Dr. E. Leslie Burgin; Messrs. A. L. Castleman, B. W. C. Cooke, Major H. E. Crawford, Messrs. F. W. Crews; G. Cole Deacon (Secretary, Railway Executive Committee), W. Donald (Deputy Director, Port & Transit Control, Shipping Division, Ministry of War Transport), R. B. Dunwoody, Sir Alfred Faulkner (Under-Secretary, Board of Trade, Petroleum Department), Sir Henry L. French (Permanent Secretary, Ministry of Food), Messrs. W. H. Gaunt (President, Mansion House Association), W. Hanlon, Sir P. J. H. Hamon, Mr. C. F. Haywood, Sir E. Haviland Hiley (Regional Transport Commissioner, Eastern Division), Mr. R. H. Hill (Deputy Director-General (Inland Transport), Ministry of War Transport), Sir Charles Hipwood, Mr. R. Moelwyn Hughes, Sir Cyril W. Hurcomb (Director-General, Ministry of War Transport), Messrs. C. F. Klapper, R. Lake (Lever Bros. & Unilever Limited), D. R. Lamb (Deputy Director of Food Transport, Ministry of Food), Brig-Gen. Sir H. Osborne Mance (Director of Inland Navigation, Ministry of War Transport), Mr. A. G. Marsden (Director of Food Transport, Ministry of Food), Sir Herbert Matthews, Messrs. A. Maynard (Great Western Railway), F. C. G. Mills (Chairman, National Conference of Road Transport Clearing Houses), E. J. Missenden (General Manager, Southern Railway), Sir H. C. Morris, Messrs. A. Mycose, P. J. Noel-Baker (Joint Parliamentary Secretary, Ministry of War Transport), Messrs. J. C. Pattenon (Director-General of Supply Services, Ministry of Supply), Charles U. Peat (Joint Parliamentary Secretary, Ministry of Supply), C. F. Roberts, Gleeson E. Robinson (Regional Transport Commissioner, London Area), A. F. Sewell (Director, Road and Rail Conference), R. W. Sewill (Director, Hauliers' National Traffic Pool), W. G. Sharp, A. Forbes Smith (Deputy Director-General of Supply Services, Ministry of Supply), F. Smith, D. G. Sofie (Secretary, Mansion House Association on Transport), Lt.-Colonel R. H. Tolerton, Messrs. F. Gordon Tucker (Regional Transport Commissioner, South Eastern Region), A. J. Webb, Brig-Gen. Sir J. M. Young (Chief Divisional Food Officer, London & Home Counties, Ministry of Food).

TRANSPORT SERVICES AND THE WAR—134

L.N.E.R. to simplify staff uniforms—Compulsory bus queues from Sunday next—The strategic Haifa-Tripoli standard-gauge railway—Further reductions in Continental passenger trains—Allied agreement for nationalising a Brazilian railway

Shortly after the announcement of the new clothes rationing arrangements, the L.N.E.R. stated that future uniforms issued to the staff are to be simplified so as to save textiles and metals and lessen the labour required for manufacture.

"We are going to eliminate piping, gold braid and chin straps, and substitute composition for metal in the manufacture of buttons," said Mr. C. H. Newton, the company's Chief General Manager, in an interview. "Other alterations will include the abolition of embroidery on jackets and overcoats and the substitution of the letters N.E. for L.N.E.R. on caps. Our totem, a simple lozenge-shaped device, containing the initials of the company, designed by the late Eric Gill and a feature of many of the uniforms of the women now at work in men's jobs, will also disappear from overcoats, overall, jackets, and caps." It is estimated that the change will affect 65,000 uniforms and more than 19,000 caps per annum.

London Retail Delivery Scheme

The retail delivery scheme for the London Region adopted by London shopkeepers to save fuel, vehicles, tyres, and man power, was brought into operation on Monday, March 30. Under this scheme, no goods except bread, milk, furniture, coal, and medicines, will be delivered more than a mile from the shop, except by pooled vehicles. There will be only one delivery a week to each customer, except newspaper deliveries, and separate calls for orders have been discontinued. The scheme applies to deliveries by all forms of transport—motor, horse, electric, and hand vehicles, and cycles.

Anti-Blast Netting on Tram Windows

Further experiments with anti-blast netting for the windows of passenger vehicles have produced a new type of fabric which will shortly be seen on London Transport tram and trolleybus windows. This is a black netting of fine texture which permits more light to pass through the glass and which gives passengers a better view of the street. The whole window will be covered with the fabric, and to increase resistance to blast it will be varnished with the exception of the usual diamond-shaped space in the centre. The edges of the "diamond" will be distinguished by yellow paint, instead of the present plastic substance. This is found to be a quicker method and gives a neater appearance.

Compulsory Bus Queues

Under the Regulation of Traffic (Formation of Queues) Order, 1942, made by the Minister of War Transport, the formation of queues by waiting bus, tram, or trolleybus passengers will be compulsory throughout the country on and after April 12. The Order applies to a stopping place, stand, or terminus, whether there is a queue sign or not. Queues of not more than two abreast must be formed as soon as six or more passengers are waiting. Any person breaking a queue, or endeavouring to enter a vehicle before those who were ahead in the queue, will be liable to prosecution.

A new Hull by-law, which received Ministry of Health approval,

came into operation on April 1, making queues compulsory at bus and tram stops in Hull where six or more persons are waiting to board a bus or tram. Persons infringing the by-law are liable to a penalty of £2.

Abolition of Basic Petrol Ration

Recent regulations of the use of petrol for private cars are designed to end pleasure motoring and to remove all non-essential cars from the road. From July 1 the basic ration will be abolished, and a petrol allowance granted only to those who can prove genuine need, such as residence in a rural area lacking adequate public transport. The halving of the petrol value of the basic ration unit for April (announced at page 313 of our February 27 issue) remains, but the figures then given for May and June are to be halved, and those for July abolished. The revised table is as follows:—

H.P.	April	May	June	Total
1-9	2	2	2	6
10	2½	2½	2½	7½
11-12	2½	2½	2½	7½
13-15	3	3	3	9
16-19	3	3	3	9
20 and over	4	3½	3½	11

The new directions do not affect motor cycles, for which the basic ration will be continued, probably until October. Motor cycles, which need a relatively small petrol allowance, are used extensively by war workers for travelling to and from work.

The New Palestine-Syria Railway

Further details are now available of the new 175-mile standard-gauge railway linking Palestine and Syria, mentioned at page 314 of our February 27 issue. The line runs from Haifa to Tripoli, thus providing a standard-gauge link of the Palestine, Syrian, and Turkish railways. The track winds partly along the Mediterranean, and then swings further inland through the snow-clad Lebanon mountains. In some places the railway was hewn out of the side of a cliff; at another point a bay is bridged; and there are four tunnels, one of which is nearly a mile long. The work is mainly in the hands of South African engineers, and a large number of South African natives experienced in mining have been employed.

The Importance of the Turksib Railway

The map of the Asiatic railways of the U.S.S.R. which we reproduced at page 110 of our issue of August 1, 1941, clearly indicated the strategic importance of the Soviet rail link between the southern system of railways at Tashkent and the Trans-Siberian Railway at Novosibirsk, in the Kussbass area of Central Siberia. Such a railway was conceived as long ago as 1878, and a map dated 1890 shows the projected route to be very similar to that actually adopted in construction. Before 1919 a branch was already in existence from Novosibirsk (then Nikolaievsk) to Semipalatinsk in Western Siberia. The section, which was opened in May, 1930, and which received such widespread publicity as an outstanding achievement of the Soviet regime, consisted of the line from Semipalatinsk, through Alma Alta, to Arys on the Tashkent Railway. The whole line from Novosibirsk to Arys is approximately 900 miles in length, and its completion was undoubtedly an important part of the achievement of the first Five-Year Plan (1928-32), although at the time it was widely reported that the railway was opened to traffic for propaganda reasons while it still remained unfinished and in many parts even unballasted. Since 1930, however, deficiencies have been made good and the Turksib Railway has had a marked effect on the development of Kazakhstan and the vast area bordering Chinese-Turkestan. In May, 1940, celebrations were held to mark the completion of a decade of operation of the Turksib Railway, and it was then stated that since the opening date something like 100 short branch lines had been built to act as feeders; about 2½ million tons of grain had been carried to Central Asia during the ten-year period, and about 3 million tons of coal and 176 million cu. ft. of timber had been conveyed. The line also provides the shortest route for Azerbaijan oil to reach the East, and more than 400 oil trains per annum were being worked two years ago. At that time the other principal traffics included mineral ores, rubber plants, cotton and hemp fibre, and 36,000 tons of beet a year. The local freight traffic was very heavy and was said to have increased threefold between 1931 and 1939. Through freight traffic is more or less balanced in each direction. A year ago the Soviet authorities had in hand new links between Tashkent and Chimkent (to cut off the detour *via* Arys), and between Semi-



A new British Railways poster

palatinsk and Slavgorod (enabling Turksib traffic to pass to Omsk and European Russia without traversing Novosibirsk and the Kussbass area). Probably by now these lines have been completed, or are nearing completion, and their strategic importance needs no emphasis in view of the trend of the world war situation.

Oslo Suburban Service Reductions

Suburban railway services in Oslo are now suspended for four hours daily, according to a message dated March 23.

Ship Salvage Railways at Dunkerque

A press message states that the Germans have laid a series of railway lines at Dunkerque so that locomotives can haul out of the sea the vessels sunk off the beach.

Road Speed Limit in France

In order to economise in the use of petrol, French motor drivers are now subject to a speed limit on the road, for the first time for many years. The national limit was fixed in February at 80 km.p.h. (49.7 m.p.h.), with a limit of 40 km.p.h. (24.8 m.p.h.) in built-up areas.

Further Italian Passenger Train Cuts

There were further reductions in the Italian passenger train services as from April 1. Sleeping cars and restaurant cars were abolished, except on international trains. First class accommodation was also abolished, except on international trains. First class carriages are now used as second class, and second class as third class. Earlier Italian passenger service curtailments and restrictions were recorded at page 346 of our March 6 issue.

Statistics of the Italian State Railways

When Italy entered the war, in June, 1940, the Italian State Railways had in operation 4,117 steam and 1,602 electric locomotives, 8,074 carriages, 4,505 mail and luggage vans, 776 diesel railcars, and 130,500 goods wagons of all types. Under construction at the time were 91 electric railcars, 141 diesel railcars, 171 carriages, and 2,744 goods wagons, according to figures recently published by the management. The same report stated that at present the mileage of the system was 17,501 km. (10,874 miles), of which 5,423 km. (3,370 miles) were electrically operated. It is alleged that new construction has proceeded without interruption since the war began.

Civilians Travel Banned in Germany

A proclamation was issued, on or about March 22, by the German Ministry of Propaganda informing civilians in Germany that they must not travel on pleasure during the Spring. Travelling by civilians will be permitted only where cases of illness are involved. Those who do not conform with these orders, it is declared, may render themselves liable to internment. The proclamation, which is quoted in the *Zwölfe Uhr Blatt*, concludes by emphasising that Germans must always bear in mind that the railways are essential at present for the Armed Forces.

Further Motorcar Restrictions in Germany

New regulations for private motorcar traffic in Germany, based upon a "Special Decree by the Führer," were published on February 19. Motorcars may now be used only when it is essential to the war effort or vitally necessary, and then only when the same end could not be achieved by the use of a public transport service. The saving of time is not in itself sufficient reason for using a motorcar. Investigation will be made by the local controllers to see whether the continued use of a private motorcar can be justified. Cars may not be used for journeys between a man's home and his place of work, for journeys of more than 75 km. (46.6 miles), or on Sundays and holidays.

Railways in Poland and Neighbourhood

The route length of lines in the Bialystok district of Poland added to the Königsberg division of the Reichsbahn at the end of 1941 (see our issue of January 30, page 175) is 1,064 km. (661 miles). There are 65 stations on the system.

With the establishment on December 1, 1941, of the new division (*direktion*) at Lwow, there are now four Reichsbahn divisions (*direktionen*) in Poland, namely, Warsaw, Krakow, Radom, and Lwow.

New Railways in Croatia

The construction of the standard-gauge railways from Bihac to Knin and from Banje Luka to Pribinic, which was proceeding under the Yugoslav Government by the French contractor, the Cie. des Batignolles, is now being completed by local contractors under a new agreement with the Croatian State Railways department. To the agreement has been added the construction of an extension to Ploce (a small port on the Adriatic coast) of the Gabela-Metkovic branch of the Sarajevo-Dubrovnik narrow-gauge line. The railway from Vrsbovsko to Kocevje, construction of which had already been begun under the Yugoslav Government, will be abandoned with the exception of a short section from Vrsbovsko, presumably as far as the new Italian border. Surveys of four other lines are reported to

have been completed, and construction is to begin in the spring. They are the Senj branch of the Zagreb-Split line to the port of Senj on the Adriatic; an extension of the Varazdin-Golubovec line in the north-eastern corner of Croatia, to a junction with the Grobelno-Zagreb line; an extension of the Pavlovac-Garesnica line to Banova Jaruga Junction on the Zagreb-Novska main line; and a new line from Sarajevo to Zapce.

Drava Bridge at Gyekenes Now Restored

The Drava bridge on the Hungarian-Croatian frontier between Gyekenes and Botovo (on the Budapest-Zagreb main line) was repaired and placed in service a few days before Christmas, 1941, and traffic on this important main line between Hungary, Croatia, Germany, and Italy was immediately resumed. The frontier is on the Hungarian side of the river and the bridge is in Croatian territory, but the reconstruction was carried out jointly by the Hungarian and Croatian Railways.

Hungarian Canal Construction

The construction of a canal joining the Danube and Theiss rivers in Hungary is to be begun in the spring, according to reports from Budapest.

Hungaro-Slovak Railway Transit Traffic

Hungarian transit traffic with sealed trains through a corner of Slovakia was begun on January 1 between the sections of the Hungarian State Railways situated to the south and the east respectively of Bratislava (Pressburg), as recorded at page 371 of our March 13 issue. Examination of the map of the revised frontiers after the Munich agreement (reproduced at page 902 of our issue of November 25, 1938) shows, however, that a short section of German (Austrian) territory is also traversed. We now learn that the Hungarian State Railways concluded an agreement with the Reichsbahn as well as with the Slovak State Railways for the regulation of through traffic between Hungarian stations both sides of Bratislava over the Petržalka-Bratislava-Uzor and Galanta lines. The German section is only 7 km. long and has no stations, but the Slovak sections are considerably longer. Over the German section trains are run with Hungarian engines and trains crews, but on the Slovak sections trains are worked with Slovak engines and crews. Customs and passport formalities are waived for these Hungarian trains, and Hungarian tariffs are applied to the traffic carried by such trains. Payments by Hungarian State Railways to the other administrations are based on fixed rates per axle-kilometre.

Railway Developments in Roumania

With the re-opening on December 18 last of the Krakow-Lwow-Cernauti main line (recorded in THE RAILWAY GAZETTE of January 30, 1942, page 175), a pair of new fast trains was introduced between Bucharest and Berlin *via* this new route, scheduled to cover the distance in 41½ hours each way; Mitropa sleeping and dining cars are included in these trains. The new service is in addition to the existing service between the two capitals *via* Budapest and Breslau. Goods traffic on the same route was reopened on December 20.

The Wagon Lits Company's sleeping cars are still working in Roumania, on the sections from Bucharest to Budapest, Arad, Cernauti, Jassy *via* Pascin, Chisinau, and Galatz.

At the beginning of 1942 all lines in the territory retaken from Russia were in operation again, with the exception of the Balti-Rezina line, but including a new line constructed by the Russians between Arciz on the Barlad to Cetatea-Alba line, and the port of Ismail in the Danube delta.

The sum of 14½ million Lei (£1½ million) has been allocated to the construction of a train ferry across the River Dniester at its mouth, to connect the Roumanian Railways terminus with the terminus of the Russian line to Odessa.

Brazilian Railway Nationalised under Allied Agreement

The U.S.A. and Brazil signed three far-reaching agreements on March 3 aimed at the widespread development of strategic war materials for the defence of the Western Hemisphere. The third agreement provides for the completion of the Victoria-Minas Railway, which taps one of the world's richest iron-ore deposits. Until now, this railway has been owned by the Cia. Estrada de ferro Victoria a Minas, and has often been called the Victoria-Itabira Railway. There are 561 km. (349 miles) of metre-gauge line open, and a further 169 km. (105 miles) have been surveyed. Lord Halifax was one of the signatories of this agreement (as Great Britain is involved), under which the Itabira mining properties and the Victoria-Minas Railway are acquired by the Brazilian Government. The mines have been held by private British interests. Brazil is to be loaned a maximum of \$14,000,000 (about £3,500,000) for the rehabilitation of the railway and mines and the improvement of ore-loading facilities at Port Victoria. The loan will be repayable from the proceeds of the production and transport of iron ore to be purchased by the Metals Reserve Company (a United States Government concern) and the British Government. As a result of the agreement, high-grade iron ore will be forthcoming for Great Britain.

RAILWAY AND OTHER MEETINGS

Isle of Man Railway Company

The annual general meeting of the Isle of Man Railway Company was held in the company's offices on March 11. Mr. R. Q. Hampton, M.H.K., Chairman of the company, presided.

Mr. A. M. Sheard (Secretary & Manager), having read the notice convening the meeting and the auditors' report and certificate.

The Chairman said that when last he addressed shareholders he had been able to report that a small but very welcome recovery had taken place in the traffic receipts of the company. It had been with satisfaction and relief that the directors had seen this continue and grow, and the extent of the improvement was the outstanding feature of the report and balance sheet. It was a justification for the claim then made that the Isle of Man Railway Company gave an important and vital service to the whole of the island which no other means of transport or distribution could. The improvement in the company's financial position was due entirely to its ability to give this service, never more necessary than now.

The company's position at December 31, 1940, was such that it was unable to pay the interest due on the debentures on that date. The difficulty was lack of liquid funds. Although war conditions forced the company to postpone this one payment, it was able to pay it on May 26, and since then two other payments had been met on their respective due dates. The revenue account showed a gratifying increase in receipts of £29,626—the only item showing a de-

crease (apart from a small difference in transfer fees) was rents, etc. Not included in this account, but brought into account in the net revenue account was a dividend of £2,800 from the subsidiary company, the Isle of Man Road Services Limited, which was also an improvement.

The improvement in passenger revenue was most encouraging. It was noticeable in practically every district and was caused by the increasing number of new residents, and by special traffic since war began. The train was used to a greater extent, too, on account of the facilities for carrying passengers' luggage, etc., and because of the greater comfort in winter and bad weather.

The much greater haulage of heavy goods was evidenced by the receipts from "merchandise, minerals, etc.," which showed increases of 28,351 in tons handled, and £7,396 in earnings. The year's revenue from this class of work was a record. Due to the intensive working, the week by week revenue aggregated a year's total that had not been equalled since 1926. A valuable contract was apparently nearing its end, and it would be optimistic to count upon the continuance of the present working indefinitely.

The company had been reluctantly compelled to advance the rates for conveyance of both passengers and goods. Experience was that increased charges might in certain circumstances have had a restrictive effect, but since April the company had paid over £3,000 in advances granted in rates of pay; coal and all other essential supplies were greatly

enhanced in price. Tariffs, therefore, had also to rise. The balance carried to net revenue account was £18,751, and interest from investments, £2,850, making a total of £21,601. After wiping out the debit balance from the previous year of £5,819, paying the debenture interest at 4 per cent., £7,000, and the minor items of rent charges and general interest, there remained a sum of £8,546 as a disposable balance. This it was proposed to allocate as:—dividend on preference shares at the rate of 2½ per cent. for the year, £1,250; general reserve, £1,000; rolling stock suspense account, £3,000; relaying account, £1,500; stations rebuilding account, £500—a total of £7,250; leaving a balance to be carried forward of £1,296.

He voiced appreciation of the work done by the company's officials and staff, and said that in the past he had eulogised the manager's (Mr. Sheard's) business ability. He could only add that the year's problems, had been met by him on lines the directors could endorse.

Early in 1940, the company applied to the Insular Government asking that a guarantee similar to that which the English Government had given of recent years to English railway companies should be granted to keep efficiency unimpaired for war and postwar service. This had been refused. The company, however, was offered a loan of £2,500 without interest for the duration of the war. This was subject to conditions, the chief of which was that the rate of interest paid to the debenture-holders should be reduced. The directors did not agree that this was a practical or indeed a right solution, and declined the offer.

The report and accounts were adopted.

The Assam Railways & Trading Co. Ltd.

The ordinary general meeting of the Assam Railways & Trading Co. Ltd. was held on March 25 at the company's offices, 154-156, Fenchurch Street, London, E.C.2. Mr. E. A. A. Joseph, Chairman of the company, presided.

The Chairman said that shareholders had already had the accounts, and they had also received with them a statement which was intended to take the place of an address which he might otherwise have made. He would add that on the previous day he had received a cable from India announcing that the Administrator-General had ordered the taking over of the Dibru Sadiya Railway as a temporary measure, and it would be worked by the Bengal & Assam Railway. Exactly what was involved was not yet known by the directors; they did not know what the financial arrangements would be.

The report and accounts were adopted, and Mr. Douglas William Turner, J.P., was confirmed in his appointment as a director. The auditors, Messrs. Price, Waterhouse & Company, were re-elected.

The statement by the Chairman circulated with the accounts was as follows:—

In the interests of economy, I am following this year the practice widely adopted since the outbreak of war, of circulating the speech ordinarily made at the annual general meeting with the accounts.

The accounts presented to you are printed in an altered form. The necessity to save paper suggested some alterations, and advantage has been taken of this to reconsider a form which had become traditional and to make our accounts much more concise and, it is

hoped, convey the results of the year's work more clearly than before.

The railway revenue is better than last year, and it is encouraging to note a progressive increase in each of the last four years. Passenger earnings were stable, and goods earnings showed a definite improvement. Unfortunately, expenses were higher, largely due to the dearness allowance granted to the Indian staff to help it to meet the increased cost of living. Consequently there is a slight decrease in net earnings. Expenses in the trading department were increased for the same reasons, but the net earnings are the best we have had for a number of years past. Coal sales were a little down, but sales of the company's other products were better than in the previous year.

Dividends were received from the company's main investments at the same rates as in the previous year; the falling off in this item was due to larger deductions for income tax and less general interest received.

The new Workmen's Provident Fund and the extension of the system of gratuities, both explained at the general meetings in 1939 and 1940, account for the increase under these headings.

At the suggestion of the auditors, the debit for the preference dividends for the year has been made net, that is the actual amount paid after deduction of tax. The provision made for taxation is in one inclusive item, in India and at home, and includes the adjustments required by the above arrangement. The company's appeal for a reconsideration of the Excess Profits standard has not yet been decided.

In the balance sheet the details of the

capital expenditure on the railway, usually given in a separate statement, have been omitted to economise space. The chief items are a locomotive boiler and extensions to station buildings. The trading department expenditure is mainly an extension to the timber siding. Depreciation has been written off this at a higher rate. Investments remain unaltered, except for a small increase in the holding of the company's own debentures. The provision for the reserve for renewals and depreciation is at the same rate as in the previous year. There is an adjustment for a small quantity of rolling stock written off and a credit for the sale of scrap.

The certificates respecting the railway and the collieries have not been printed, but they have been received in the usual form and can be seen at the company's office by any shareholder if so desired.

I forecast that our accounts this year would not make a very good showing. I gladly acknowledge that they are better than I anticipated, but with the very large provision that we have again had to make for taxation we regret that we cannot recommend the payment of a dividend on the "A" stock. We propose that the usual amount of £3,000 be written off net issue expenses, and that the balance left in net revenue (appropriation) account, £49,354, be carried forward.

The returns of the current year received up to the present suggest an improvement on the results of 1940/41. It must, however, be realised that the war in the East (which has already led to a great reduction in our staff) is casting its shadow on all our operations, and that precautionary measures may involve us in expenditure that cannot yet be calculated.

Associated Electrical Industries Limited

The annual general meeting of Associated Electrical Industries Limited was held at the offices of the company, Crown House, Aldwych, London, W.C.2, on March 31. Sir Felix J. C. Pole, Chairman of the company, presided.

The Secretary, Mr. R. C. Haviland, A.C.A., having read the notice convening the meeting and the auditors' report,

The Chairman said that it would be seen from the profit and loss account that, after providing for taxation, the profit for the year was £681,536, compared with £716,795 for the previous year, a decrease of £35,259 or 4.9 per cent. After charging £263,296 against £261,283 for depreciation of plant, etc., the net profit was £418,240, a decrease of £37,272. The depreciation provision just mentioned was in respect of the Metropolitan-Vickers Electrical Co. Ltd. only. Depreciation provided by all the companies in the associated group totalled £573,428. To the net profit of £418,240 had to be added £265,472, the balance brought forward from the previous year, making a total profit available for distribution of £683,712.

The directors had again appropriated £100,000 to the dividend equalisation reserve account, increasing it to £500,000. The object of this reserve was to keep dividends on an even basis and doubtless shareholders had observed that this equalisation reserve on which tax had been paid, represented over 20 per cent. gross on the ordinary issued stock.

After providing for dividends on preference stock, £52,306, there remained £531,406, and the directors recommended a dividend on the ordinary stock of 10 per cent. per annum, less tax, leaving a balance to be carried forward of £285,314, as compared with £265,472 brought in from the previous year.

Dealing now with the balance sheet, it would be seen that creditors, loans, accrued charges, and reserves for contingencies (£6,989,218) and amounts owing to subsidiary companies (£293,064) a total of £7,282,282, showed an increase of £1,669,901. In order to finance increased business, it had been necessary to borrow from bankers £800,000. On the assets side of the balance sheet shareholdings and debentures in subsidiary companies, and investments in other than British Government securities totalled £3,874,662, a decrease of £333,774; the reduction was due partly to writing down the book value of certain investments, and partly to disposing of certain shares in a subsidiary company at a profit. The total book value of investments, however, was very substantially below their real worth even when valued on a most conservative basis. The stocks and materials on hand, debtors, etc., amounted to £10,423,708, an increase of £3,873,385. Cash and British Government securities at £311,266 showed a decrease of £652,795, which was another indication of the financial effort required to meet the growth of floating assets.

As usual, a consolidated balance sheet was published showing the position of the associated group as a single unit. He directed shareholders' attention to the strength of the group as demonstrated by the capital reserve account, the special and general reserves, and profit and loss accounts, which items had increased by £203,317 to £3,956,168, a total which

represented 80 per cent. on the ordinary capital.

As to the company's manufacturing activities, he did not propose to go into details. The knowledge and skill of the company's technicians and manufacturing staffs had been in constant demand in making improvements in designs and in accommodating factory areas and manufacturing programmes to secure the highest degree of workshop efficiency and the most speedy flow of output. The desire of everybody connected with the company was to do the utmost to win the war speedily, and all ranks of the company's employees were rendering outstanding services.

He expressed sincere thanks to the Executive Directors, officers, and all ranks and grades of employees, who had rendered splendid service. Work had been well and cheerfully done, often in trying circumstances.

It was interesting to recall that at a time when the Minister of Labour was urging all companies to establish works committees, the Metropolitan-Vickers Electrical Company's Works Committee was already 25 years old. That committee had performed most useful service. The Chairman was Mr. Sam Ratcliffe,

who in the New Year Honours had the distinction of being awarded the M.B.E. by the King.

The extension of the war into Far East zones had naturally affected the company's export turnover, and they could not hope for improvement during the combatant occupation of those areas. This curtailment of export work was an unavoidable circumstance of the war that the directors deplored, for they placed great weight on the export turnover, which in peacetime was a very material part of the company's business and had often helped to eliminate gaps in departmental production that might otherwise have occurred.

The company's research facilities had been expanded during the year. The provision of new and substitute materials had involved urgent and continuous inquiry and effort. Close co-operation was maintained with the various scientific departments of the Government.

The company was making grants to the dependents of employees who were serving with the Forces, and there was a war assistance fund for organised distribution of comforts to its people on active service.

The report and accounts were adopted, the retiring directors re-elected, and the proceedings closed with a vote of thanks to the chairman.

The British Automatic Co. Ltd.

The ordinary general meeting of the British Automatic Co. Ltd. was held at Winchester House, Old Broad Street, E.C.2, on April 2. Major R. D. K. Curling, M.C., Chairman and Managing Director, presided.

The Acting Secretary, Mr. Ivan B. Lindley, having read the notice convening the meeting and the auditors' report,

The Chairman said that Major Dodge was still a prisoner of war and as far as was known he was quite well.

The company's investments showed an increase of £11,829 at £105,979 and of this figure approximately 65 per cent. was represented by Government securities which included £12,000 subscribed for during the year and since the date of the accounts a further £15,000 had been taken up. Total cash amounted to £102,270 and was £23,154 more than last year. During the year the company had purchased and cancelled debenture stock to the amount of £22,160 representing a reduction in interest accrued of £609.

Depreciation and renewals account had been increased by £23,000 to £219,000 by the allocation of £32,898 from profits for the year, and a transfer of £9,667 from contingency reserve less £19,565, the value of machines scrapped. The next item, deferred maintenance of machines reserve, £10,000, appeared this year for the first time and was created to provide for repairs to machines after the war.

The year's trading profit of £85,344 was only £3,659 less than last year after making provision of £10,000 for deferred maintenance of machines. The net profit of £37,023 was, however, £11,599 less than for 1940 but £10,000 of this was due to the amount the company had had to provide for income tax. Any necessary provision for Excess Profits Tax would again be made by the parent company, Associated Automatic Machine Corporation Limited.

The profit for the year together with the balance of the profit brought forward from 1940 amounted to £44,939, from which had been allocated £32,899 to depreciation and renewals account, leaving a balance of £12,040. From this was recommended a dividend of 4 per cent., less income tax, which would take £8,000 and leave £4,040 to be carried forward. The chief difficulties with which the company had had to contend during the past twelve months and which were a constant problem were the strict rationing of commodities and shortage of staff to service and maintain the machines. Every effort had been made to maintain the machines in the best possible order but with the drastic cutting down of the company's staff this had been difficult. Supplies had been of necessity reduced but every effort had been made to distribute the supplies as evenly as possible. The demand on the commodities sold through the machines was greater than ever and whilst the public was inclined to think that the machines were standing empty this was far from the case; the truth was that as soon as the machines were filled they were emptied. The takings from chocolate machines were down but the new lines of cigarettes which the company now sold had become popular, and had resulted in increased sales, and weighing machine receipts had also shown an appreciable increase during the year.

It was always a matter of great satisfaction to him to refer to the very friendly and satisfactory relationship existing between the railway companies and the company, but he wanted particularly to say how grateful the directors were to the railway officers for the willing and helpful way they had assisted the company during a difficult year. Supplies of chocolates for the machines came from only two sources today, one from the

company's factory at Glasgow—Reeves Limited—and the other from Nestle Products Limited. The company was fortunate in possessing a factory which was giving it such excellent chocolate and profits and also in having such good trade friends as Nestle and other suppliers.

It was useless under present conditions to attempt to forecast trading for the current year, but he felt that he ought to

warn shareholders that as their business depended largely on the sale of wrapped chocolate through machines any further curtailment of supplies would naturally adversely affect the trading profit.

In the management the company had an excellent team and the slogan was "work of each for weal of all." He thanked the General Manager, Mr. F. L. Timmins, the Managers, and all the staff

for having consistently kept their shoulders to the collar throughout the year, and for doing their very utmost in the interests of the company without which the results obtained could not possibly have been achieved. He also thanked his colleagues on the board for having so ably assisted him during the year under review.

The report and accounts were adopted.

Mansion House Association on Transport Annual Luncheon

The annual luncheon of the Mansion House Association on Transport was held at the Connaught Rooms, London, W.C.2, on March 24. Mr. W. H. Gaunt, C.B.E., President of the association, was in the Chair, and Mr. P. J. Noel-Baker, Parliamentary Secretary to the Ministry of War Transport, was the principal guest.

Mr. Gaunt in the course of his speech recalled that a year earlier he had said that the need for big operative planning in the railway world was evident. Since then Sir Ernest Lemon, a Vice-President of the London Midland & Scottish Railway, had been commissioned, with Major Pope and some operative railway experts, to make recommendations to this end. He believed that what they would recommend would be thorough, and hoped the four railways would be given all the advantages claimed for nationalisation, without the removal of competitive stimulus which many feared would mar that extreme measure.

The Great Britain of the future might have to be so planned as to be prepared at short notice to function under war conditions. The southern and eastern ports, including London, could never again be allowed to be rebuilt in peace and reduced in war to their present physical status, while the western ports were overtaxed to breaking point, and their avenues of rail and road suffered a strain from the altered incidence of traffic.

Mr. P. J. Noel-Baker, Joint Parliamentary Secretary to the Ministry of War Transport, said that one of the problems to which a good deal of attention was being given was that of providing good and adequate food for locomotive crews on our freight trains, men who were often working twelve to fourteen hours a day. He felt that we might be in some danger in not allowing enough priority to all forms of transport; it was not enough to produce munitions unless they could be carried to their destination. He referred to the recent pressure in de-reservation of men under 40 years of age, and said that he hoped that the matter would be looked into from the viewpoint of maintaining a healthy road and rail transport service, and that some re-classification might be made.

At the present time there was a tremendous strain on the railway system, and it would be of the greatest assistance if traders would see that wagons and packages were clearly labelled. Further, if everyone would arrange their dispatches so that vans did not have to wait it would be a contribution to the war effort; it was possible to try to see that wagons were loaded to full capacity; if there was one direction in which it was possible to make a large and quick economy it was in the full loading of wagons. He added that at present 25 per cent. of all goods sent by rail were dispatched as carriage forward; if they could all be sent carriage paid it would be a great help to over-worked railway staffs.

It might soon become necessary, unless the co-operation of the public was secured in refraining from unnecessary travel, to place more onerous burdens on the public



Sorting paper salvage to assist the war effort. The railways have already contributed many tons of old documents and records

than the curtailment of sleepers and dining cars so far effected.

In planning for conditions after the war every factor in transport would have to be taken into account. It would be necessary for the railways to preserve the methods of co-operation which they were operating in war; it would be necessary to secure the co-operation between road and rail, and also to bring in the canals. The canals last year had carried 11½ million tons of goods, half of which was coal.

Mr. Charles U. Peat, Joint Parliamentary Secretary, Ministry of Supply, said that his Ministry was primarily a producer, and it recognised how vital a link was transport in the chain of production. Among the guests was Mr. J. C. Patteson,

who was in charge of the Transportation of the Ministry, and Mr. A. Forbes Smith, who was in immediate control of it.

Leaving aside coal traffic, which was in a category by itself, the Ministry of Supply was probably the largest transport user that the country had ever known. It had been handling more than half the total imports of the United Kingdom; its internal traffic represented about half the general merchandise traffic on the railways, besides large movements by coastal vessel, road, and canal. This would indicate the wide scope of the work which the Transportation Department had to do.

The system of traffic control for manufactured stores, which included arms, ammunition, equipment, and components, produced by the Ministry of Supply for the Army, was necessarily much more detailed than in the case of raw materials. Briefly the system was that contracts were placed on an ex-works basis, and the Transportation Department made the necessary transport arrangements on behalf of the contractors. He went on to enumerate the various means by which the Transportation Department could assist traders in their transport problems, and also indicated some ways in which the trader could help the Transportation Department.

HAITI RAILWAY BONDS.—The Council of Foreign Bondholders has recently been informed by the Treasury that the Haytian Government decided by a decree law of October 18, 1941, to prescribe all bonds of the Compagnie Nationale des Chemins de fer d'Haiti which shall not have been exchanged by October 1, 1943, into 6 per cent. external 30-year sinking fund gold bonds, series "C."

INSTITUTION OF RAILWAY SIGNAL ENGINEERS.—The annual general meeting of the Institution of Railway Signal Engineers was held at the Institution of Electrical Engineers, London, on March 25. The President, Mr. James Boot, took the chair and moved the adoption of the annual report and statement of accounts for 1941, and reviewed the work done during the year. Mr. Boot was re-elected President, Mr. R. F. Morkill, Vice-President, Mr. M. G. Tweedie, Hon. Secretary, and Mr. T. S. Lascelles, Hon. Treasurer. The ballot for the new council resulted in the election of the following: Messrs. T. Austin, L. J. Boucher, F. L. Castle, R. Dell, F. J. Dutton, H. H. Dyer, J. H. Fraser, C. H. Hills, F. Horler, R. W. Jones, L. J. M. Knotts, P. Lomas, A. Moss, L. Preston, and A. W. Woodbridge. Mr. T. Austin was no longer eligible to serve as an auditor, and Mr. V. S. King was elected to the vacancy, and Mr. F. Edwards, the serving auditor, was re-elected. After the formal business had been completed Mr. Boot delivered a short address in which he touched on electrical interlocking and circuit problems and tendencies in modern power signalling work.

Staff and Labour Matters

Essential Work (General Provisions) Order, 1942

The Minister of Labour and National Service has made a new Essential Work Order which consolidates the provisions of the former orders with some clarifying amendments and introduces certain new provisions. The new provisions may be summarised as follows:—

(1) Where a worker, discharged by his employer on the grounds of serious misconduct, appeals to the Local Appeal Board and the National Service Officer subsequently directs the employer to reinstate him, the worker will, subject to the usual conditions, be entitled to retrospective payment of the guaranteed wage from the date of discharge until reinstatement takes place.

(2) The period of fourteen days allowed for lodging appeals to the Local Appeal Board is reduced to seven days, but the National Service Officer will have power to admit such appeals beyond that period where good cause for the delay is shown.

(3) Employers are permitted to give a worker four days' notice suspending the guaranteed wage if no work is available for that worker because other employees in the undertaking are taking part in an illegal strike. When the employer has suspended the guaranteed wage of a worker under this provision he must as soon as he is in a position to provide work for him give him a further notice that work is available, and if the worker fails without reasonable excuse to present himself for work on the day on which work is available, his employment is deemed to have terminated. If he does return to work on that day his rights to the guaranteed wage are resumed. While the guaranteed wage is suspended the worker is free, after giving any notice required by his contract of service to leave the employment without obtaining the permission of the National Service Officer and without giving the statutory seven days' notice.

All undertakings and workers to whom the earlier orders were applicable, automatically come under the provisions of the new Order.

Questions in Parliament

Railway Shunters Cheese Ration

The case of railway shunters is not considered to justify the grant of the special ration of cheese which is given to engine drivers, firemen, signalmen and other heavy workers, as it is felt that the provision of other feeding facilities should not be impracticable. (Major G. Lloyd George, Parliamentary Secretary, Ministry of Food, March 11.)

Carriage of Ice Cream by Rail

The Minister of Food has already restricted the production of ice cream. The principal manufacturers have arranged, or are arranging, to make and distribute ice cream at central points in all the principal regions. This has already eliminated a great part of the long distance haulage by rail from London to the provinces.—(Mr. P. J. Noel-Baker, Joint Parliamentary Secretary, Ministry of War Transport, March 17.)

New Stretford-Barton Road

It has been necessary to defer many other road improvements of greater value than the new Stretford-Barton Road to concentrate labour and material on work necessary

to the war effort. Since there are other suitable public roads available, I see no sufficient grounds for altering the decision. I am not aware of any difficulties with railway or private interests, and that, if they exist, they have not influenced our decision.—(Mr. P. J. Noel-Baker, March 17.)

L.N.E.R. Workshops

I am informed that the manufacturing capacity not fully utilised at a London & North Eastern Railway workshop is mainly wood-working capacity, of which there is, under present conditions, a surplus in this country. The possibility of making further use of this and other railway workshops for munitions production, with due consideration to the need for railway maintenance work, is having the attention of the departments concerned. The Minister of War Transport and the Minister of Supply would always welcome specific suggestions to this end. (Mr. R. Assheton, Joint Parliamentary Secretary, Ministry of Supply, March 17.)

Sleeping Berths

Of the total number of first class berths allocated by the Ministry of War Transport on trains to Newcastle and Scotland about 20 per cent. have been allocated to members of the Forces. Information about berths booked by members of the Forces direct from the railway companies is not available.—(Mr. P. J. Noel-Baker, March 18.)

Road Services

Regional Transport Commissioners have instructions to vary pre-war restrictions on the picking up of passengers where this would result in better facilities for war workers. These restrictions are often necessary and useful, for example, in preventing long distance passengers being crowded out by short distance passengers for whom other services may be available.—(Mr. P. J. Noel-Baker, March 18.)

Traffic Co-ordination

On assuming office, the Minister of War Transport reviewed the control of the railways and introduced a revised arrangement. A road haulage scheme has been developed and has now been brought into operation. Broadly, all our means of public passenger and goods transport have been or are being co-ordinated, under Government direction, in the interests of the war effort.—(Mr. P. J. Noel-Baker, March 18.)

Speed Limit

I cannot adopt the suggestion of Major L. Kimball (Loughborough—C.) to increase the speed limit above 20 m.p.h. for heavy commercial vehicles during daylight hours, in order to allow journeys to be completed in a shorter time, with a resultant decrease in the hours of blackout driving and in the numbers of commercial vehicles on the roads during blackout hours. Since the war, the maximum weight of vehicles permitted to exceed a speed of 20 miles an hour has been raised from 2½ to 3 tons weight unladen, and, on ground of public safety on the roads, and of wear and tear of the highways, no further concession would be justified.—(Mr. P. J. Noel-Baker, March 18.)

Workmen's Fares

The extension of workmen's tickets to London Transport buses would tend to divert to those buses traffic now carried by other forms of transport and this would in turn necessitate an increase in the number of buses in service. The board is not in a position to meet the demand for additional buses and staff, which in these circumstances would arise. There are, moreover, serious objections to any step which would result in

increasing the consumption of motor fuel and tyres.—(Mr. P. J. Noel-Baker, March 18.)

Parliamentary Notes

Indian Railway Bill

The Bombay, Baroda & Central India Railway Bill was reported, with amendments, to the House of Commons on March 19 from the Committee on Unopposed Bills, with a report on the Bill. The Bill, as amended, and the report were ordered to lie upon the Table, and the report was ordered to be printed.

British and Irish Railway Stocks and Shares

Stocks	Highest 1941	Lowest 1941	Prices	
			April 3 1942	Rise/ Fall
G.W.R.				
Cons. Ord.	43½	30½	41½	— 2
5% Con. Pref.	109½	83½	114½	+ 2
5% Red. Pref. (1950) ..	105½	96	108	—
4% Deb.	113½	102½	115½	—
4½% Deb.	115	105½	116½	—
4½% Deb.	121½	112	123½	—
5% Deb.	132	122	135	—
2½% Deb.	70	62½	72½	+ 1
5% Rt. Charge	129½	116	132½	—
5% Cons. Guar.	128	110½	129½	—
L.M.S.R.				
Ord.	17½	11	18½	+ ½
4% Pref. (1923)	53	33½	53	—
4% Pref.	68½	48½	72	+ 2
5% Red. Pref. (1955) ..	97½	77	97½	—
4% Deb.	105½	97	106	—
5% Red. Deb. (1952) ..	110½	106½	109½	—
4% Guar.	100	85½	102½	—
L.N.E.R.				
5% Pref. Ord.	3½	2½	3½	—
Def. Ord.	2	1½	2	—
4% First Pref.	52½	33	52	— ½
4% Second Pref.	19½	10	20	—
5% Red. Pref. (1955) ..	79½	52	87	+ 2
4% First Guar.	90½	74½	96½	+ 2
4% Second Guar.	80½	59	82½	—
4% Deb.	79½	68½	82	—
3% Deb.	104	91½	105	+ 1
4½% Red. Deb. (1947) ..	106	102½	104	—
4½% Sinking Fund Red. Deb.	103½	99½	103½	+ 1
SOUTHERN				
Pref. Ord.	65½	43½	63½	— 2
Def. Ord.	15	9	15	—
5% Pref.	107	77½	111½	+ 3
5% Red. Pref. (1964) ..	107	89½	107	—
5% Guar. Pref.	128	111	129½	—
5% Red. Guar. Pref. (1957) ..	114½	107½	113½	—
4% Deb.	112	102½	112½	—
5% Deb.	130½	119	134	—
4½% Red. Deb. (1962- 67) ..	108½	102	108½	+ 1
4½% Red. Deb. (1970- 80) ..	108½	102½	108½	—
FORTH BRIDGE				
4% Deb.	99½	90½	103½	+ 1
4% Guar.	99	85½	103½	+ 1
L.P.T.B.				
4½% "A"	120½	109½	121½	+ 1
5% "A"	130½	115½	130½	+ 1
4½% "T.F.A."	103½	99½	102	— ½
5% "B"	117	102	119½	+ 1
5% "C"	46½	28½	40	+ 1
MERSEY				
Ord.	24½	19½	21½	—
4% Perp. Deb.	100	90	100	—
3% Perp. Deb.	73½	63	75	—
3% Perp. Pref.	58	51½	58	+ 1
IRELAND BELFAST & C.D.				
Ord.	4	4	4	—
G. NORTHERN				
Ord.	14½	3	14	—
G. SOUTHERN				
Ord.	14½	5	11	—
Pref.	17	10	17	—
Guar.	44	16	39	—
Deb.	61	42	59½	+ 1

NOTES AND NEWS

Peruvian Corporation Limited.—Holders of the first mortgage debentures have been paid on April 1 £2 per cent. on account of interest. This payment is in full discharge of balance coupon No. 93, representing the unpaid balance of the interest instalment due on October 1, 1936.

Road Motors in the British West Indies.—On June 30, 1941, motor vehicles in use in Barbados numbered 2,042 passenger cars, 522 lorries and buses, and 69 motorcycles of which 1,009, 407, and 8, respectively, were of United States and Canadian makes, and 995, 114, and 61 were of British build.

Express Derailed on L.N.E.R.—Early in the morning of March 28, as the 7.5 p.m. express from King's Cross was passing East Linton, about 20 miles from Edinburgh, a rod failed on the engine. The tender and eight coaches left the metals. There was some minor damage to vehicles, and the track was torn up for some distance. No injury of any consequence appears to have been notified.

Bengal & North Western Railway Debenture Stock.—The Secretary of State for India has informed the Bengal & North Western Railway that it is the intention of the Government of India to assume liability for the £2,500,000 of 5 per cent. special debenture stock as from January 1, 1943, the date on which the company's railways are to be taken over by the government.

British Thomson-Houston Co. Ltd.—In the course of his statement at the recent ordinary general meeting of this company, Mr. William C. Lusk, the Chairman, referred to the comprehensive training scheme for women which had been organised and put into operation about the beginning of 1940. The scheme is intended to give quickly to those who had had no previous experience of factory life suitable instruction in such functions as machine operation,

assembly, inspection, storekeeping, etc. This scheme is proving very successful.

Less Travel at Easter.—The Ministry of War Transport states that more goods and fewer passengers were carried over Easter 'by the railways than ever before and the Minister acknowledges the loyal co-operation of the public in abstaining from travel.

Arica & Tacna Railway Company.—As a result of the taking over, on February 1, of this company's railway by the Peruvian Government, the directors considered it advisable that they should have sufficient powers to take any steps and conclude any deals affecting the company's rights and properties. They accordingly recommended an amendment of the statutes with this end in view. The necessary resolution for this purpose was carried unanimously at an extra-ordinary general meeting held in London on March 19. Reference to the actions of the Peruvian Government was made on page 350 of THE RAILWAY GAZETTE for March 6 last.

Great Southern Railways (Ire).—For the 11th week of 1942 the Great Southern Railways (Ire) reports passenger receipts of £32,731 (against £40,796), and goods receipts of £56,667 (against £46,445), making a total of £89,398, against £87,241 for the corresponding period of the previous year. For the 12th week of 1942 the Great Southern Railways (Ire) reports passenger receipts of £31,653 (against £33,368), and goods receipts of £64,393 (against £55,700), making a total of £96,046, against £89,068 for the corresponding period of the previous year. The aggregate receipts to date are passenger, £370,522 (against £400,627), goods, £732,720 (against £605,042), making a total of £1,103,242 (against £1,005,669).

Transport Services Limited.—In his address at the recent adjourned annual general meeting of this company, Mr. H. C. Drayton, the Chairman, pointed out that the company had been and was running

its vehicles flat out, making use of every bit of space available. He was not at all sure that the company was not in the national interest overrunning its vehicles; the directors nevertheless thought it was the only thing to be done. If the vehicles had been run at only 50 per cent. of their capacity, the company would be considerably better off, as it would reduce the turnover and have about £180,000 in the business, by which present ramifications could be extended. Needless to say, the company would continue to run its vehicles to their fullest capacity.

Road Accidents in February, 1942.—The return issued by the Minister of War Transport of the number of persons reported to have died or to have been injured as a result of road accidents during the month of February last shows 510 deaths (compared with 689 in February, 1941), 2,633 seriously injured, and 7,745 slightly injured. Comparative figures for persons injured are not available for February, 1941.

S.R. Locomotive Named "Canadian Pacific."—On March 27, Mr. F. W. Mottley, Acting European Manager, Canadian Pacific Railway, named the fifth of the Southern Railway Merchant Navy class mixed-traffic locomotives the *Canadian Pacific*. Mr. R. Holland-Martin, Chairman of the Southern Railway Company, presided at the ceremony, which was held at Victoria Station. Mr. Mottley said that Sir Edward Beatty, Chairman & President of the C.P.R., had sent him a message saying that he considered it an honour to have a locomotive designated *Canadian Pacific*, and looked upon it as a tribute to the men of that company's fleet who had lost their lives at sea, or who were still serving heroically. Mr. Mottley added that the Canadian Pacific Railway Company had enjoyed many years of cordial co-operation with the Southern Railway Company. The war had interrupted the sailing of vessels of the Atlantic Fleet of the Canadian Pacific to Southampton, but he looked forward to the time when it would be assumed after victory had been won.

Railway and Other Reports

Midland Railway Co. of Western Australia Ltd.—The directors have decided to recommend a dividend of 2½ per cent. on the unified ordinary stock in respect of the year to June 30, 1941, less income tax at 10s. in the £. £1,483 will be placed to reversionary certificates redemption account. There has been transferred to depreciation and renewals account £45,000, and to taxation reserve account £1,000, and a balance of £43,980 is carried forward.

King's Lynn Docks & Railway Company.—Net revenue for the year 1941, including the estimated adjustment in respect of the period of control and a sum of £2,000 which has been provided for taxes but is not now required, amounted to £5,363. Adding £56 brought forward and £1,300 transferred from general reserve account, makes a total of £6,719. Debenture interests of £6,705 has been paid, leaving £14 to be carried forward.

Southport & Cheshire Lines Extension Railway.—In the report for 1941 it is stated that it is proposed that the company shall receive annually for the control of the railway by the Government £7,732, but that final agreement has not yet been reached. Net revenue account, including

£1,927 brought forward from the previous year, shows an estimated balance, after payment of the £6,000 debenture dividend, of £3,689 (£3,802). The full rate of interest on the 2½ per cent. preference stock is to be paid, requiring £1,875 (same), leaving £1,814 to be carried forward.

British Thomson-Houston Co. Ltd.—After deducting all expenses and charges other than interest and after providing for taxation (which was £785,000 in 1940) the profit for 1941 was £559,776. Debenture and loan interest requires £86,506 and £229,667 is appropriated to depreciation, leaving a net profit of £243,603 (£245,126). General reserve again gets £100,000, and the ordinary dividend is again 7 per cent., leaving to be carried forward £217,413 (£196,310).

Associated Electrical Industries Limited.—Profit for the year 1941, which includes dividends from subsidiaries, and is ascertained after providing for management expenses, maintenance of buildings and machinery, contingencies, taxation, etc., amounted to £681,536 (£716,795). Depreciation takes £263,296 (£261,283), leaving a net profit of £418,240 (£455,512). Preference payments require £52,306, and a sum of £100,000 is again appropriated to dividend equalisation account. The directors recommend a dividend of 10 per cent., less tax, on the ordinary stock (same),

absorbing £246,092, and leaving £285,314 (£265,472) to be carried forward.

British Automatic Co. Ltd.—Trading profit for the year 1941 was £85,344 (£89,003) and other income £4,530 (£3,504), making £89,874 (£92,507). The net profit after debenture interest and other charges, which included £14,348 for income tax (£4,375), was £37,023, against £92,507. Depreciation and renewals take £32,898 (£34,456), and the dividend of 4 per cent., less tax, absorbs £8,000, leaving £4,041 to be carried forward, against £7,916 brought in. For the previous year the dividend was 6 per cent., less tax, and absorbed £13,800. Takings from the company's machines continued to show a decrease on account of the war, but the manufacturing business of Reeves Limited in Glasgow still shows improved results.

Forthcoming Meetings

April 10 (Fri.).—North Devon & Cornwall Junction Light Railway Company (Annual general), Southern Railway Company's Offices, Central Station, Exeter, at 3.15 p.m.

April 13 (Mon.).—Midland Railway Co. of Western Australia Ltd. (Ordinary general), Winchester House, Old Broad Street, E.C.2, at 12.30 p.m.

Railway Stock Market

Idle conditions have prevailed in Stock Exchange markets, where sentiment was governed by Budget and war uncertainties and the Indian position. In most sections, security values were inclined to ease, but this was due to the small demand experienced, very little selling having been in evidence. Buying centred on British Funds and other high-grade investment issues, partly due to further reinvestment of proceeds arising from the requisitioned Canadian stocks. Many of the latter comprised Canadian railway securities, and it is apparent that a fair proportion of the money has been reinvested in home railway prior charges and preference stocks. At one time home railway junior issues were in better demand and improved prices ruled, but subsequently they reflected the inactivity of markets and reacted slightly, although at the time of writing the general trend appears to be somewhat firmer. Debenture stocks were firmly held, and tended to move with gilt-edged, but in some instances were fractionally lower on balance. There was steady demand for guaranteed and preference stocks, and although in all cases best prices made recently were not fully held, various gains of a point or more were shown on balance. There is a disposition in some quarters to take the view that, because of the good yields still offered, demand for

these securities is likely to continue, and that over a period prices may show substantial improvement. Moreover, when markets become reasonably active, the junior stocks, including Southern deferred and also L.N.E.R. second preference, may attract a good deal more attention on yield considerations. The latter may become an increasingly important market factor, bearing in mind that, owing to steadily declining supplies of materials and goods and the weight of taxation, somewhat lower dividends may be in prospect for a wide range of industrial shares.

Despite the inactive market conditions ruling at the time of writing, Great Western ordinary stock at 41½ has shown only a fractional decline on balance. Whereas Great Western debentures were half-a-point lower at 114½, the guaranteed stock improved by that amount to 130, and the 5 per cent. preference moved up from 112½ to 114. L.M.S.R. guaranteed has improved on balance from 102½ to 103 at the time of writing; the senior preference was slightly higher at 71½, and the 1923 preference has been maintained around 53, and the ordinary stock was little changed at 18. L.M.S.R. 4 per cent. debentures were better at 106½. Among senior preference stocks, L.M.S.R. 4 per cents continue to be considered as undervalued in many quarters, bearing in

mind, the extent to which dividend requirements were covered on the basis of last year's figures, and the fact that the yield at the current price of 71½ works out at 5½ per cent. L.N.E.R. guaranteed issues have been favoured; on balance the firsts have risen from 95 to 96½ at the time of writing, and the seconds from 82 to 83. L.N.E.R. first preference was unchanged at 52, but during the same period the second preference improved from 20 to 20½. Among Southern issues, the preferred was unchanged on balance at 63½, as was the deferred at 15. Southern 4 per cent. debentures were slightly lower at 112, but elsewhere, the guaranteed stock gained half-a-point to 130, and the 5 per cent. preference moved up from 108½ to 112. London Transport "C" was a point better at 40; sentiment was influenced by the decision to convert the £12,583,000 of 4½ per cent. T.F.A. stock to a lower basis, it being pointed out that a reduction of 1 per cent. interest on this stock would provide sufficient to pay ½ per cent. on the "C" stock.

In accordance with the prevailing tendency on the Stock Exchange, South American railway securities lost part of their recent improvement. Central Uruguay second debentures, however, improved to 31, and Leopoldina debentures to 38, while San Paulo ordinary made the higher price of 45½. Canadian Pacific issues were little changed. Indian railway stocks showed further declines on balance.

Traffic Table of Overseas and Foreign Railways Publishing Weekly Returns

Railways	Miles open 1941-42	Week Ending	Traffic for Week		No. of Weeks	Aggregate Traffic to date			Shares or Stock	Prices			
			Total this year	Inc. or Dec. compared with 1941		Totals		Increase or Decrease		Highest 1941	Lowest 1941	April, 3 1942	Yield (See Note)
						This Year	Last Year						
South & Central America													
Antofagasta (Chili) & Bolivia	834	29.3.42	£ 28,330	+ £ 8,640	13	£ 252,590	£ 220,380	+ £ 32,210	Ord. Stk.	10½	3½	9½	Nil
Argentine North Eastern	753	28.3.42	ps. 154,600	+ ps. 22,900	39	ps. 6,765,500	ps. 5,712,000	+ ps. 1,053,500	Ord. Stk.	4	1	3½	Nil
Bolivar	174	Feb., 1942	4,612	+ 1,132	9	9,572	6,680	+ 2,892	6 p.c. Deb.	5	5	9	Nil
Brazil	...	...	...	...	...	...	...	...	Bonds	8	2½	11	Nil
Buenos Ayres & Pacific	2,801	28.3.42	ps. 1,545,000	- ps. 405,000	39	ps. 55,592,000	ps. 54,029,000	+ ps. 1,563,000	Ord. Stk.	73	12	5	Nil
Buenos Ayres Great Southern	5,080	28.3.42	ps. 2,641,000	- ps. 387,000	39	ps. 94,608,000	ps. 85,258,000	+ ps. 9,350,000	Ord. Stk.	104	3½	8	Nil
Buenos Ayres Western	1,930	28.3.42	ps. 937,000	- ps. 114,000	39	ps. 33,223,000	ps. 29,258,000	+ ps. 3,965,000	Ord. Stk.	9	2½	7½	Nil
Central Argentine	3,700	28.3.42	ps. 1,717,500	- ps. 458,000	39	ps. 68,551,150	ps. 60,410,200	+ ps. 8,140,950	Ord. Stk.	8½	2½	6	Nil
Do.	...	...	...	...	...	...	...	...	Dfd.	2½	1	3½	Nil
Cent. Uruguay of M. Video	972	28.3.42	31,830	+ 6,900	39	951,799	868,301	+ 83,498	Ord. Stk.	9½	1	6½	Nil
Costa Rica	262	Feb., 1942	21,014	+ 2,106	34	180,476	152,672	+ 27,804	Ord. Stk.	15½	9½	13	15½
Dorada	70	Feb., 1942	10,584	- 1,416	9	21,184	24,200	- 3,016	1st. Db.	97	17	90½	Nil
Entre Rios	808	28.3.42	ps. 210,700	+ ps. 5,700	39	ps. 9,921,100	ps. 8,374,200	+ ps. 1,546,900	Ord. Stk.	6½	1	5	Nil
Great Western of Brazil	1,030	28.3.42	9,700	+ 100	13	144,400	145,400	- 1,000	Ord. Sh.	11½	1½	8	Nil
International of Cl. Amer.	794	Feb., 1942	\$154,927	+ \$81,080	8	\$333,440	\$184,198	+ \$149,242	1st Pref.	—	6d.	—	Nil
Interoceanic of Mexico	...	...	...	...	...	...	...	...	...	...	...	...	...
La Guaira & Caracas	224	Mar., 1942	7,470	+ 1,950	13	19,860	18,995	+ 865	Ord. Stk.	4	½	4	Nil
Leopoldina	1,918	28.3.42	32,578	+ 6,703	13	378,100	310,956	+ 67,144	Ord. Stk.	—	—	—	Nil
Mexican	483	14.3.42	ps. 348,400	+ ps. 39,600	30	ps. 3,464,900	ps. 3,226,000	+ ps. 238,900	Ord. Stk.	—	—	—	Nil
Midland of Uruguay	319	Jan., 1942	13,595	+ 864	30	94,595	82,608	+ 11,987	Ord. Sh.	66½	1½	3½	3½
Nitrate	386	31.3.42	10,972	+ 4,739	13	35,900	26,732	+ 9,168	Pr. Li. Stk.	43½	29	42½	14½
Paraguay Central	274	28.3.42	\$2,919,000	+ \$28,000	39	\$133,453,000	\$126,563,000	+ \$6,890,000	Ord. Sh.	43½	29	42½	14½
Peruvian Corporation	1,059	Feb., 1942	69,053	+ 13,241	35	582,024	516,957	+ 65,067	Pref.	6½	1½	7	Nil
Salvador	100	Feb., 1942	c 157,000	+ c 52,000	34	c 656,172	c 507,683	+ c 148,489	Ord. Stk.	52	24½	45	4½
San Paulo	1534	29.3.42	32,717	+ 5,733	13	447,099	432,858	+ 14,241	Ord. Stk.	1	—	—	—
Taital	160	Feb., 1942	4,220	+ 1,145	35	35,115	22,510	+ 12,605	Ord. Sh.	1	6½	1½	Nil
United of Havana	1,346	29.3.42	67,563	+ 18,864	39	1,044,234	843,940	+ 200,294	Ord. Stk.	2½	—	3	Nil
Uruguay Northern	73	Jan., 1942	954	- 208	30	8,908	8,251	+ 657	Ord. Stk.	—	—	—	—
Canada													
Canadian National	23,562	21.3.42	1,130,300	+ 25,220	12	1,410,700	1,135,300	+ 2,754,800	Ord. Stk.	13½	7½	11	Nil
Canadian Pacific	17,139	31.3.42	1,396,000	+ 282,200	13	11,528,800	9,082,600	+ 2,446,200	Ord. Stk.	13½	7½	11	Nil
India													
Barsi Light	202	Jan., 1942	11,805	- 3,525	45	137,482	135,210	+ 2,272	Ord. Stk.	345	253	336½	5½
Bengal & North Western	2,099	Feb., 1942	253,950	+ 22,121	22	1,369,985	1,312,583	+ 57,402	Ord. Stk.	101	95½	90½	4½
Bengal-Nagpur	3,267	20.1.42	279,900	+ 28,764	43	7,860,240	7,124,397	+ 735,843	Ord. Stk.	105½	101½	93½	8½
Madras & Southern Mahratta	2,939	31.1.42	218,100	+ 27,862	45	6,020,015	5,083,020	+ 936,995	Ord. Stk.	342	290	342½	4½
Rohilkund & Kumaon	571	Feb., 1942	53,475	+ 12,594	22	266,764	286,327	- 19,562	Ord. Stk.	100	87	91½	3½
South Indian	2,402	20.1.42	134,249	+ 18,493	43	4,273,558	3,670,793	+ 602,765	Ord. Stk.	100	87	91½	3½
Various													
Beira	204	Jan., 1942	68,716	-	17	288,331	—	—	Pr. Sh.	14	29½	24	Nil
Egyptian Delta	610	20.1.42	12,496	+ 3,975	43	272,885	194,988	+ 77,897	B. Deb.	68	45	35	10
Manila	277	Nov., 1941	21,710	+ 5,994	17	103,592	78,885	+ 24,707	Inc. Deb.	90½	85½	89½	6½
Midland of W. Australia	1,900	Jan., 1942	71,391	+ 25,823	43	2,557,812	1,834,363	+ 723,449	Ord. Stk.	—	—	—	—
Nigerian	2,442	Jan., 1942	471,753	-	17	1,899,961	—	—	Ord. Stk.	—	—	—	—
Rhodesia	1,329	14.2.42	817,072	+ 113,924	46	35,159,964	31,920,165	+ 3,239,799	Ord. Stk.	—	—	—	—
South Africa	4,774	Dec. 1941	1,250,508	+ 240,622	25	6,627,999	5,615,574	+ 1,012,425	Ord. Stk.	—	—	—	—
Victoria	...	...	...	...	...	...	...	...	Ord. Stk.	—	—	—	—

Note. Yields are based on the approximate current prices and are within a fraction of ½. Argentine traffic is given in pesos
+ Receipts are calculated @ 1s. 6d. to the rupee ½ ex dividend